

EnergyCo



Submissions Report

Hunter Transmission Project

February 2026



The Energy Corporation of NSW (EnergyCo) is part of the Department of Climate Change, Energy, the Environment and Water (DCCEEW)

Official

Acknowledgement of Country

We acknowledge that Aboriginal and Torres Strait Islander peoples are the First Peoples and Traditional Custodians of Australia, and the oldest continuing culture in human history.

We would like to respectfully acknowledge the Wonnarua, Awabakal and Darkinjung people as the Traditional Custodians of the land on which we deliver our project to the community. We pay our respects to Elders past, present and emerging and to all Aboriginal people of these communities.

We acknowledge the work that Aboriginal people have done to maintain land and water and will show respect through thoughtful and collaborative approaches to engage with the Aboriginal community to ensure local priorities and values inform and influence decision making.

We reflect on the continuing impact of government policies and practices and recognise our responsibility to work together, with and for Aboriginal and Torres Strait Islander peoples, families and communities towards improved economic, social and cultural outcomes.

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Executive summary

Background

The Hunter Transmission Project (HTP, the project) is a critical State significant infrastructure (CSSI) and a Priority Network Infrastructure Project (PNIP) proposed by the Energy Corporation of New South Wales (EnergyCo). The project involves the construction and operation of a new overhead 500 kilovolt (kV) double circuit transmission line of approximately 110 kilometres between Bayswater and Olney State Forest near Eraring in the Hunter region of New South Wales (NSW). The project traverses five local government areas (LGA): Muswellbrook, Singleton, Cessnock, Central Coast and Lake Macquarie.

The project includes the development of two new switching stations (Bayswater South and Olney), upgrades to the existing Bayswater and Eraring substations, adjustments and upgrades to existing transmission lines, property adjustment works, utility adjustments, and a range of ancillary works required to support construction and operation. These ancillary works include, road upgrades, establishment of new access tracks and upgrades to existing access tracks, construction support sites (some with temporary worker accommodation) and laydown areas.

The HTP would provide the necessary transmission infrastructure to connect renewable energy generation projects in the Central-West Orana and New England Renewable Energy Zones (REZs) into the national electricity market (NEM).

Purpose of this report

An environmental impact statement (EIS) was prepared to support EnergyCo's application for approval of the project in accordance with Part 5, Division 5.2 of the NSW *Environmental Planning and Assessment Act 1979* (EP&A Act) and was placed on public exhibition between 27 August 2025 and 24 September 2025. This Submissions Report responds to the submissions made during the public exhibition period and explains who made submissions, what issues they raised and how these issues have been addressed.

After considering issues raised in the submissions, stakeholder feedback before and during the public exhibition, further design development and feedback provided by design and construct tenderers for the project, EnergyCo is proposing several amendments and refinements to the HTP. These changes are detailed in a separate Amendment Report, which also describes changes to impacts arising from the proposed amendments and refinements and how those impacts would be managed and mitigated.

This Submissions Report should be read in conjunction with the Amendment Report, as the Amendment Report provides additional assessment, assessment clarifications, and updated mitigation measures arising from submissions.

Overview of submissions received

A total of 188 submissions were received and registered on the Planning Portal website maintained by the NSW Department of Planning, Housing and Infrastructure (DPHI). These included:

- 165 from the community, including:
 - 138 from members of the public
 - 27 from organisations (including representative community groups, special interest groups, utility owners and mining companies directly affected by the project)
- 23 from government, including:
 - four from local councils
 - 19 from NSW and Australian government agencies/departments.

Of the 138 submissions received from the members of the public, 10 (or seven per cent) provided support for the project, 26 (or 19 per cent) provided neutral comment on the project and 102 (or 74 per cent) objected to the HTP. Of the 27 submissions from organisations, all provided comment on the project but did not state an overall position on, or objection to, the HTP.

Of the submissions received from local councils and government departments/agencies the advice received provided comment on the project but did not state an overall position on, or objection to, the HTP.

Issues raised

Community submissions (which included members of the public and organisations) mostly raised issues about the project's environmental, social and economic impacts as well as route selection, project development and assessment issues (more than 80 per cent of issues). The top issues included:

1. social, primarily relating to impacts on community, health and wellbeing and impacts on accessibility and livelihoods and how these impacts would be managed
2. hazards and risks, primarily relating to the increased risk of bushfires and impacts to firefighting operations, risks associated with electric and magnetic fields and aviation safety
3. biodiversity, primarily relating to the magnitude of biodiversity impacts, e.g. the extent of clearing and impacts to threatened species and ecological communities, and the methodology used in the assessment
4. alternatives and options, primarily relating to the transmission line alignment alternatives and route selection
5. engagement, primarily relating to the consultation during project development and future community and stakeholder engagement.

This report summarises the issues raised in the community submissions, and for ease of responding, similar issues raised in individual submissions are grouped and combined responses have been provided.

Submissions from local councils and government department/agencies generally relate to the specific agency or public authority area of responsibility including (among others):

- potential impacts of construction traffic on local and regional road networks and the management of construction vehicle movements
- biodiversity impacts, including the adequacy of mitigation and management measures
- the location and management of temporary worker accommodation and interactions between the construction workforce and local communities

This report responds to each issue raised by local councils and government departments/agencies separately.

Mitigation and management

The EIS outlined the approach to environmental management of the project and identified the mitigation measures that would be implemented to address potential impacts of the HTP. The approach to environmental management has been updated in the Amendment Report. In addition, some mitigation measures presented in the EIS have been revised and some new mitigation measures have been added based on the issues raised in submissions and consideration of the proposed amendments and refinements to the HTP. The updated mitigation measures are provided in *Appendix D (Updated mitigation measures)* of the Amendment Report.

Next steps

EnergyCo has considered the issues raised in submissions and has provided responses in this Submissions Report. DPHI will review this Submissions Report alongside the EIS and the Amendment Report.

DPHI will prepare an assessment report for consideration by the NSW Minister for Planning and Public Spaces, who will determine whether to approve the project under Part 5, Division 5.2 of the EP&A Act. If the project is approved, DPHI's assessment report and any NSW Conditions of Approval will be provided to the Australian Minister for the Environment and Water for consideration under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The Australian Minister will then decide whether the project should be approved and, if so, what Commonwealth conditions (if any) should apply.

If the project is approved, EnergyCo will continue to consult with the community, local councils, government departments/agencies and other stakeholders during detailed design, construction and operation of the project to manage and mitigate the impacts of the HTP.

Glossary

Term	Definition
Access tracks	Temporary and permanent tracks used to access the project. Refer to <i>Appendix A (Updated project description)</i> of the Amendment Report for further details.
Amended project	The amendments and refinements to the project as described in the EIS (inclusive of clarifications for the exhibited project). The amendments to the project include: - changes to 500 kV transmission line infrastructure, including: - realignment of the transmission line at Mount Thorley - realignment of the transmission line at Gouldsville - localised easement widening for conductor swing - changes to substation infrastructure at Eraring - changes to intersections, access roads and access tracks, including: - changes to access track locations - minor adjustments to the project impact area for intersection upgrades - adjustments to the proposed access routes for construction - changes to construction methods and facilities, including: - reconfiguration of the construction support sites and worker accommodation facilities - changes to the location of laydown areas within State forests - reconfiguration of the Flick Road emergency helicopter landing area - removal of a stringing site within Olney State Forest - changes to construction plant and equipment types and locations of use. Refinements to the project include: - minor changes at Bayswater substation - changes to the disturbance area Olney.
Amendment	Change(s) to the project description as included in the exhibited project. As a result, changes to what the proponent is seeking approval for are required, along with an amendment to the CSSI application for the project.
Bayswater Power Station	Existing power station at Bayswater owned by AGL.
Bayswater South switching station	The new switching station that would be constructed south of Bayswater Power Station.

Term	Definition
Clarification	Additional information developed as a result of ongoing design and construction methodology development, submissions received during exhibition of the EIS, minor errors identified in the EIS, or further assessment that has been undertaken since exhibition of the EIS. Clarifications for the project include: • assessment of impacts from use of Pokolbin Mountains Road • assessment of potential contamination impacts at Eraring Power Station description of intersection upgrades in the EIS.
Construction	Works to be carried out following pre-construction minor works and early works for the transmission line and substations/switching stations. Construction staging plans for transmission line construction and substation/switching station construction would be prepared by the relevant construction contractors, which will detail how the construction activities will progress.
Construction impact area	The area that would be directly impacted by the construction of the project, including (but not limited to) transmission towers and lines, stringing sites, access roads, access tracks, substations, switching stations, adjustments and upgrades to existing lines, communications infrastructure, temporary worker accommodation, construction support sites, laydown areas and utility adjustments.
Construction access routes	Roads used by construction vehicles (light and heavy).
Construction support site	An area used as the base for construction activities, usually for the storage of plant/equipment and materials, processing facilities (concrete batching, aggregate crushing, grinding and screening), maintenance facilities/workshops, staff facilities, firefighting equipment, helicopter landing pad and support facilities, access and parking, and wastewater treatment. Some construction support sites would also include temporary worker accommodation. Construction support sites are discussed in <i>section A3.5 of Appendix A (Updated project description)</i> of the Amendment Report.
Critical State significant infrastructure (CSSI) application area	The critical State significant infrastructure (CSSI) application for the project covers 5 local government areas (Muswellbrook, Singleton, Cessnock, Central Coast and Lake Macquarie).
Cumulative impact	The combined impacts of the project on a matter with other relevant future projects.

Term	Definition
Disturbance area	This is used primarily to assess potential impacts on biodiversity values in <i>Appendix E (Revised biodiversity development assessment report)</i>. Includes the following categories: • disturbance area A • disturbance area A (centreline) • disturbance area B • disturbance area HZ.
Disturbance area A	The area where vegetation would be completely removed. It includes areas at and around transmission towers (including tower pads and batters), stringing sites, laydown areas, switching stations, substation upgrades, construction support sites, new and upgraded access tracks and road upgrades. Impacts within this area would include sub-surface disturbance from construction activities such as grading, excavation, and full tree removal. With the exception of areas that only require temporary disturbance (i.e. temporary access tracks and stringing sites), this area would also be subject to ongoing maintenance during operation (including vegetation removal to ground level) for operational and safety requirements, including bushfire risk management.
Disturbance area A (centreline)	A 20-metre-wide centreline area between transmission towers where all vegetation would be removed to ground level during construction. This area would also be subject to ongoing maintenance during operation (i.e. removal to maintain vegetation clearance requirements) for operational and safety requirements, including bushfire risk management.
Disturbance area B	The area within the transmission line easement, excluding disturbance area A and disturbance area A (centreline), where partial clearing would be undertaken. Removal of vegetation (including trees) would be undertaken only where it has the potential to exceed vegetation clearance heights. These heights are set for operational and safety requirements, including bushfire risk management (a minimum of 13.5 metres below the conductors at maximum operating temperature). Vegetation with mature growth heights up to two metres can remain, while vegetation exceeding two metres will be managed to maintain these clearance heights. This area would be subject to ongoing maintenance during operation.

Term	Definition
Disturbance area hazard tree zone (HZ)	Hazard trees are those that have the potential to pose a risk to safe operation of the transmission line by falling onto the transmission towers, conductors and associated infrastructure within the easement. A hazard tree zone has been identified in limited areas on either side of the transmission line easement through LiDAR analysis of tree heights and topography. Hazard tree management would occur during operation to maintain safe operating clearances for the conductors and tower structures. The hazard tree zone will be inspected for trees in the height range of 20 metres or more, which is typically in the high-risk category. High-risk category trees will be assessed for structural instability and managed according to the risk present, including tree removal if required.
Early works	Early works would include activities to be carried out following the approval of relevant management plans for the project, such as vegetation clearing in the transmission corridor, at construction support sites and for access tracks and road upgrade works, site establishment works and erection of temporary facilities at construction support sites including temporary worker accommodation, and the delivery of oversize equipment to work sites.
EnergyCo	The Energy Corporation of New South Wales constituted by Section 7 of the <i>NSW Energy and Utilities Administration Act 1987</i> as the NSW Government-controlled statutory authority appointed as the infrastructure planner under the <i>NSW Electricity Infrastructure Investment Act 2020</i> responsible for the delivery of NSW's REZs. The proponent for the project.
Eraring Power Station	Existing power station at Eraring operated by Origin Energy.
Exclusion zone	A safe clearance area around the transmission line and towers to protect public safety, the network and to maintain access to the asset. It delineates the area where most land use activities are prohibited. The zone is located within the easement and is defined according to the operational voltage and design of the infrastructure.
Exhibited project	The project as described in the publicly exhibited EIS.
Hunter Transmission Project (HTP) or project	The project as described in <i>Appendix A (Updated project description)</i> of the Amendment Report and identified in the overview figures of the Amendment Report.

Term	Definition
HTP corridor	Comprises: - the transmission line corridor connecting Bayswater South switching station to Olney switching station - the transmission line corridor connecting the Bayswater South switching station to the existing 500 kV transmission line near Bayswater Power Station - the transmission line corridor connecting the Olney switching station to the existing 500 kV transmission line between Eraring and Kemps Creek. The HTP corridor is around 140 metres wide.
HTP North, HTP Central and HTP South	Three geographical zones defined as: - HTP North – Bayswater to Broke includes the Bayswater Power Station, major coal mining complexes in the Upper Hunter Valley, Mount Thorley Industrial Estate, Singleton Military Area, and several rural properties generally on the alluvial floodplains of the Hunter River - HTP Central – Pokolbin to Corrabare includes the Pokolbin and Corrabare State forests and the rural residential areas between these forests at Cedar Creek, Millfield and Laguna - HTP South – Olney to Eraring includes the Watagan and Olney State forests, Watagans National Park, the residential areas in Martinsville and Cooranbong, and Eraring Power Station.
Laydown areas	Established to allow for flexibility in construction and to minimise the need for vehicle movements to and from the construction support sites. These would act as temporary staging, storage, and complex plant/equipment setup areas. They would also act as traffic control nodes during construction of the project.
No clearing zone	Areas within the transmission line easement where vegetation removal is not required. These areas would occur where there is sufficient separation of 10 metres or more between the maximum operating temperature conductor position and the existing vegetation. This area is excluded from the disturbance area.
Olney switching station	The new switching station that would be constructed in Olney State Forest.
Operation impact area	The area that would be occupied by permanent components of the project and/or maintained, including transmission line easements, transmission lines and towers, substations, switching stations, communications infrastructure, maintenance facilities, permanent access roads to substations and switching stations and access tracks to the transmission line easement.
Pre-construction minor works	Activities with a low potential to impact the environment that may be permissible in advance of construction and without the requirement for an approved construction environmental management plan (CEMP).

Term	Definition
Project impact area	The area that has been assumed for the purpose of the amendment report to be directly affected by the construction and operation of the project. It includes the indicative location of project infrastructure, the area that would be directly disturbed during construction and any easement required during operation.
(the) proponent	The Energy Corporation of NSW (EnergyCo).
Refinement	A change that fits within the limits set by the project description of the exhibited project and does not change what the proponent is seeking approval for and/or does not require an amendment to the CSSI application for the project.
Renewable Energy Zone (REZ)	A geographic area identified and declared by the NSW Government as a Renewable Energy Zone.
Stringing site	Used for the preparation, assembly and operation of stringing equipment to connect the transmission line to the towers. Stringing sites would be positioned along the HTP corridor. On other transmission projects, they may be referred to as 'brake and winch' sites.
Substation	A facility used to increase or decrease voltages between incoming and outgoing lines (e.g. 330 kV to 500 kV).
Switching station	A facility used to connect two or more distinct transmission lines of the same designated voltage.
Temporary worker accommodation	Temporary accommodation that would be erected and used during construction to house the construction workforce. Temporary worker accommodation would be located at some construction support sites.
Transgrid	Preferred network operator for the project.
Transmission line easement	An area surrounding and including the transmission lines which is a legal proprietary right and allows for ongoing access and maintenance of the transmission lines. Landowners can typically continue to use most of the land within transmission line easements, subject to some restrictions for safety and operational reasons.
Transmission tower	For 500 kV transmission lines, this is typically a free-standing steel lattice structure (suspension or tension tower). Transmission towers for the project would generally be up to 85 metres high.

1

Introduction

1 Introduction

This chapter provides a background to the project, an overview of the key features of the project and identifies amendments/refinements to the project, provides the statutory context of the project, and engagement undertaken since exhibition of the EIS. The chapter also outlines the overall structure and content of the Submissions Report.

1.1 Overview

The NSW energy system is undergoing a once-in-a-generation transformation as we move from reliance on coal-fired power to renewable energy to meet our daily needs.

Coal-fired power stations currently provide most of NSW's electricity supply as well as the firming capacity that keeps the grid stable during peak periods such as summer heat waves. Most of these power stations are reaching the end of their life and are due to shut in the next 10 years. At the same time, our electricity demand is increasing as our population grows and we electrify our vehicles, homes, businesses and industry. This means NSW needs new electricity supply and the required associated infrastructure, urgently.

The NSW Government has developed the NSW Electricity Infrastructure Roadmap (the Roadmap) to transition NSW to a cleaner future and ensure this new supply of electricity can be reliably distributed to consumers. EnergyCo is responsible for coordinating the delivery of the Roadmap.

To maintain the energy supply to the Hunter, Sydney and Illawarra regions, 500 kilovolt (kV) transmission connections are required between Bannaby substation in Marulan south of Sydney and Bayswater Power Station in Liddell in the Upper Hunter Valley. These 500 kV transmission connections and existing 500 kV transmission lines in NSW are referred to as the '500 kV Ring'. The Hunter Transmission Project (HTP, the project) would close the northern gap of the 500 kV Ring, connecting Bayswater to a new switching station in the Olney State Forest near Eraring.

1.2 The project

The project is both a critical State significant infrastructure (CSSI) project and a Priority Network Infrastructure Project (PNIP). As the remaining coal-fired power stations close, the project is critical for energy security in New South Wales (NSW). The HTP corridor runs mostly through power station, mining and government land between Bayswater and Broke. It then traverses the Pokolbin, Corrabare, Watagan and Olney State forests where it joins the existing 500 kV transmission line running between Eraring and Kemps Creek in Western Sydney.

The project is expected to provide (up to) an additional five gigawatts (GW) of electricity transfer to the main load centres of the Hunter, Sydney and Illawarra. This would provide a substantial quantity of the necessary transfer capacity for new renewable generation from regional NSW. The project is critical to unlocking the generation capacity of the Central-West Orana and New England Renewable Energy Zones (REZs).

1.2.1 The project (as exhibited in the EIS)

The project as described in the publicly exhibited environmental impact statement (EIS) (hereafter referred to as the ‘exhibited project’) included the following features:

- a new overhead 500 kV double circuit transmission line of around 110 kilometres
- two new switching stations (Bayswater South and Olney)
- upgrades to the existing Bayswater and Eraring substations
- adjustments and upgrades to existing transmission lines
- property adjustment works to facilitate access to the transmission lines and switching stations
- utility adjustments required for the construction of the transmission network infrastructure
- ancillary works to support construction including road upgrades, establishment of new access tracks and upgrades to existing access tracks, construction support sites (some with temporary worker accommodation), and other construction facilities such as laydown areas.

1.2.2 Amendments and refinements to the project

After considering issues raised in the submissions, stakeholder feedback received before and during the public exhibition, further design development and feedback provided by design and construct tenderers for the project, EnergyCo is proposing several amendments and refinements to the exhibited project.

Amendments to the exhibited project include:

- changes to 500 kV transmission line infrastructure, including:
 - realignment of the transmission line at Mount Thorley
 - realignment of the transmission line at Gouldsville
 - localised easement widening for conductor swing
- changes to substation infrastructure at Eraring
- changes to intersections, access roads and access tracks, including:
 - changes to access track locations
 - minor adjustments to the project impact area for intersection upgrades
 - adjustments to the proposed access routes for construction
- changes to construction methods and facilities, including:
 - reconfiguration of construction support sites and temporary worker accommodation
 - changes to the location of laydown areas within State forests
 - reconfiguration of the Flick Road emergency helicopter landing area
 - removal of a stringing site within Olney State Forest
 - changes to construction plant and equipment types and locations of use.

- Refinements to the exhibited project include:
 - minor changes at Bayswater substation
 - changes to the disturbance area within Olney State Forest.

The proposed amendments and refinements to the exhibited project are described further in *Chapter 3 (Actions taken since exhibition)* of this Submissions Report and in detail in *Chapter 3 (Description of amendments and refinements)* of the Amendment Report.

The project with all proposed amendments and refinements to the exhibited project are collectively referred to as ‘the amended project’ or ‘the HTP’ in this Submissions Report.

An overview of the amended project is shown in *Figure 1-1*.

1.3 Statutory context

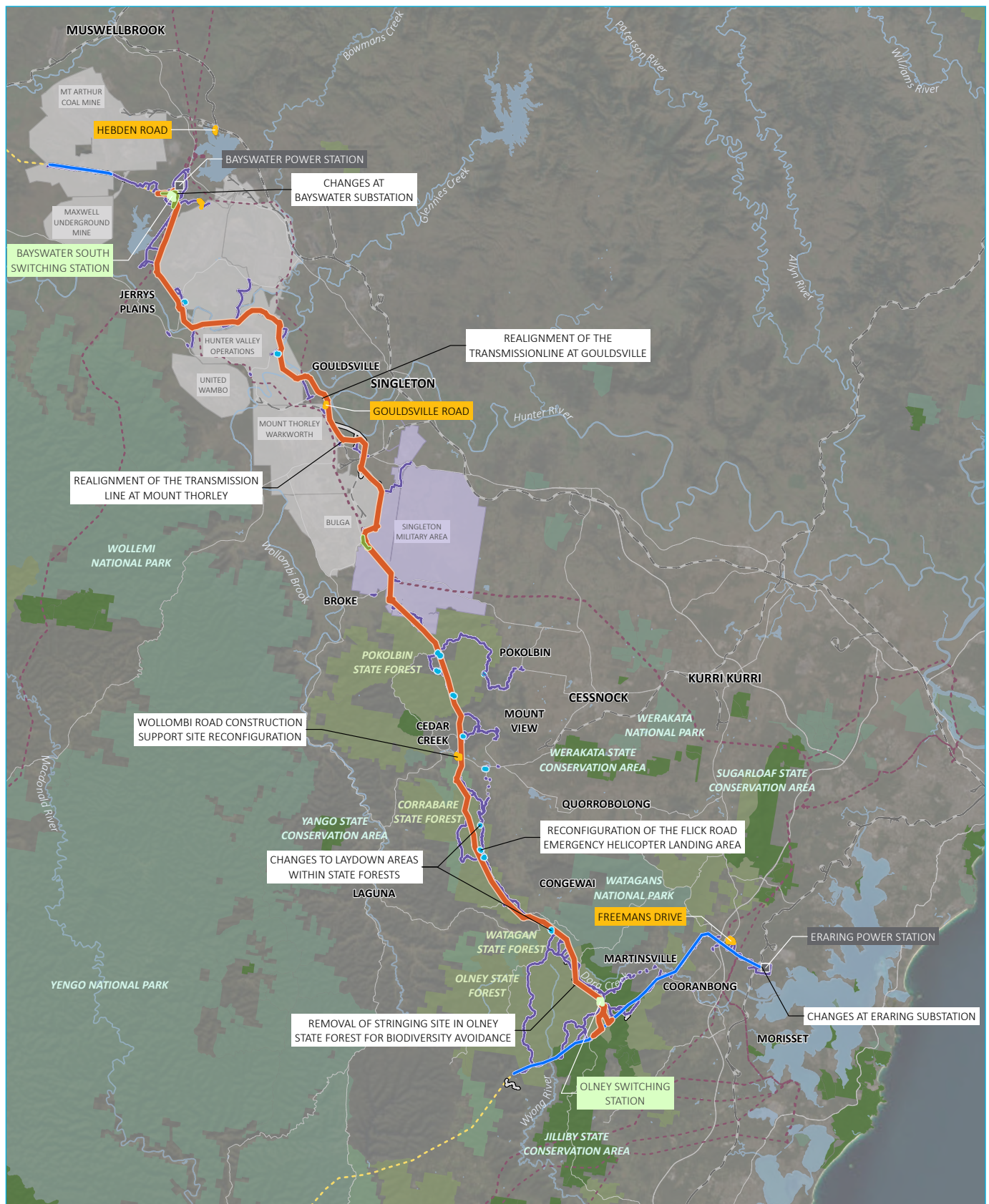
Due to its strategic importance, the project was declared as CSSI under section 5.13 of the NSW *Environmental Planning and Assessment Act 1979* (EP&A Act). The project is subject to assessment and approval by the NSW Minister for Planning and Public Spaces in accordance with Part 5, Division 5.2 of the EP&A Act.

The project is also a controlled action and requires a separate approval from the Australian Minister for the Environment and Water (or its delegate) under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

Under the existing NSW Bilateral Agreement, the NSW Department of Planning, Housing and Infrastructure (DPHI) will coordinate a detailed assessment of the impacts of the project under both the EP&A Act and EPBC Act. This will happen in a single, integrated approvals process before both ministers make a final decision on the HTP.

An EIS was prepared to support EnergyCo’s application for approval in accordance with the requirements of Division 5.2 of the EP&A Act. The EIS was prepared in accordance with the NSW Planning Secretary’s environmental assessment requirements (SEARs) issued in August 2024 and the Australian Government’s assessment requirements issued in March 2025.

The EIS was also prepared with reference to the *State significant infrastructure guidelines* (DPHI 2024a) and *State significant infrastructure guidelines – preparing an environmental impact statement, Appendix B to the State significant infrastructure guidelines* (DPIE 2022), the *Transmission Guideline* (DPHI 2024b), and addresses the requirements of Division 5, Part 8 of the *Environmental Planning and Assessment Regulation 2021* (EP&A Regulation).



KEY

Exhibited HTP project impact area

Amended project impact area

HTP corridor

Switching station

Construction support site

Laydown area

Adjustment to existing transmission line

Upgrades to existing transmission line

Access track

Existing environment

Power station

330 kV transmission line

500 kV transmission line

Railway

Major road

Named watercourse

Named waterbody

State forest

NPWS reserve

State conservation area

Defence

Energy

Project overview

Hunter Transmission Project
Submissions Report Figure 1-1

1.4 EIS exhibition

The EIS was placed on public exhibition by DPHI for 28 days between 27 August to 24 September 2025.

During the public exhibition period, government agencies, stakeholders and the community had the opportunity to make a written submission to DPHI for consideration in its assessment of the project. Consultation activities were conducted during this time and stakeholders and the broader community were invited to attend several events where they could meet key project team members and subject matter experts, and receive guidance on the submissions process.

Submissions on the EIS were made directly to DPHI and were accepted via electronic submission or by post.

1.5 Engagement

To support the public exhibition of the EIS, EnergyCo delivered a comprehensive and accessible engagement program to enable community members and stakeholders to directly engage with the project team, better understand the project, its impacts and proposed mitigation measures.

Engagement during exhibition included seven in-person community information sessions, four in-person pop-up displays, three online webinars, stakeholder briefings and one-on-one landowner meetings across the project corridor. These activities were supported by fact sheets, topic-specific materials and access to hard-copy EIS documents at events and public display locations.

The engagement program provided important opportunities for participants to receive technical information in plain language, ask questions of subject matter experts, share local knowledge and raise issues of concern. Key topics discussed included visual and landscape impacts, noise, biodiversity and threatened species, land access and acquisition processes, traffic and transport, bushfire risk and emergency management, and cumulative impacts across the Hunter region.

More than 210 people participated in community information sessions, pop-ups and webinars during the exhibition period, with additional engagement through 55 stakeholder briefings and 40 landowner meetings. Participants included residents, directly affected landowners, local councils, Aboriginal stakeholders, environmental and recreational groups, businesses and service providers.

Feedback gathered through these activities has been carefully considered in the preparation of this Submissions Report and the amendments and refinements assessed in the Amendment Report.

EnergyCo will continue to work closely with landowners, local communities, councils, Aboriginal stakeholders, industry, government partners and energy generators as the project progresses, ensuring that engagement remains transparent, responsive and aligned to the ongoing assessment, determination and delivery phases of the HTP.

1.6 Purpose and structure of this Submissions Report

DPHI provided copies of the submissions received on the project during public exhibition of the EIS to EnergyCo. On 25 September 2025, EnergyCo was directed to prepare a written response to all issues raised in submissions and agency advice, in accordance with section 5.17(6)(a) of the EP&A Act.

This Submissions Report has been prepared to respond to the submissions received as part of this process with regard to the *State significant infrastructure guidelines* (DPHI 2024a) including the content requirements for submissions reports as outlined in *State significant infrastructure guidelines – preparing a submissions report, Appendix C to the State significant infrastructure guidelines*, (DPHI 2024c).

This Submissions Report should be read in conjunction with the Amendment Report, as the Amendment Report provides additional assessment, assessment clarifications, and updated mitigation measures arising from submissions. The structure of this Submissions Report is outlined in *Table 1-1* of this Submissions Report.

Table 1-1 Structure of this Submissions Report

Chapter	Description
Chapter 1	Introduction Provides a background to the project, an overview of the key features of the project and identifies amendments/refinements to the project, provides the statutory context of the project, and engagement undertaken since exhibition of the EIS. The chapter also outlines the overall structure and content of the Submissions Report.
Chapter 2	Analysis of submissions Provides a breakdown of submissions received and categorisation of the issues raised during public exhibition of the EIS.
Chapter 3	Actions taken since exhibition Provides a summary of the changes to the project and further assessment of impacts that has been carried out since exhibition of the EIS.
Chapter 4	Engagement Provides an overview of engagement undertaken during and following public exhibition of the EIS.
Chapter 5	Response to community submissions Provides a summary of the issues raised by members of the public and EnergyCo's response those issues.
Chapter 6	Response to organisation submissions Provides a summary of the issues raised in submissions from organisations, including representative community groups, special interest groups, utility owners and mining companies directly affected by the project and EnergyCo's response those issues.

Chapter	Description
Chapter 7	Response to local council submissions Provides a summary of the issues raised in local council submissions and EnergyCo's response to those issues.
Chapter 8	Response to government submissions Provides a summary of the advice received from government departments or agencies and EnergyCo's response to the advice.
Chapter 9	Conclusion Provides an updated justification of the project and next steps for the HTP.
Chapter 10	References Provides a list of references used to inform the Submissions Report.
Appendices	
Appendix A	Submissions register

2

Analysis of submissions

2 Analysis of submissions

This chapter provides a breakdown of the submissions received and categorisation of the issues raised during public exhibition of the environmental impact statement (EIS).

2.1 Overview of submissions received

During the exhibition of the EIS (27 August to 24 September 2025), submissions to the NSW Department of Planning, Housing and Infrastructure (DPHI) were invited from the community which included members of the public and organisations (representative community groups, mining and renewable companies directly affected by the project and utility owners), government agencies and other stakeholders for consideration in its assessment of the Hunter Transmission Project (HTP, the project).

Submissions were received by DPHI via electronic online submission or by post, and were managed and coordinated by DPHI, who registered each submission and uploaded them onto the Planning Portal website (available at: [Hunter Transmission Project | Planning Portal – Department of Planning and Environment](#)).

Submissions were then provided to EnergyCo for review and consideration.

A total of 188 submissions were received and registered on the Planning Portal. Of these, 165 were received from the community (138 from members of the public and 27 from organisations). This included instances where a submitter had made multiple submissions. Advice was also received from 23 local, State and Australian Government departments and agencies. A breakdown of the submissions and the advice registered on the Planning Portal website received during public exhibition of the project is provided in *Table 2-1* of this Submissions Report.

Of the 138 submissions received from the members of the public, 10 (or seven per cent) provided support for the project, 26 (or 19 per cent) provided neutral comment on the project and 102 (or 74 per cent) objected to the HTP. Of the 27 submissions from organisations, all provided comment on the project but did not state an overall position on, or objection to, the HTP.

Of the four submissions received from local councils, all provided comment on the project but did not state an overall position on, or objection to, the project. Similarly, all the NSW and Australian government department or agency advice received provided comment on the project but did not state an overall position on, or objection to, the HTP.

Table 2-1 Breakdown of submissions or advice registered on the Planning Portal website by type

Category	Description	Total
Community	Members of the public	138
	Organisations, including representative community groups, special interest groups, utility owners and mining companies directly affected by the project	27
Government	Local councils	4
	NSW and Australian government agencies and departments	19

2.2 Community submissions

Submissions from members of the public and organisations, referred to as ‘community’ submissions for the purposes of this report, were analysed to understand the themes in the issues raised.

2.2.1 Approach to analysing community submissions

Each community submission was reviewed by EnergyCo, and the issues raised were summarised, categorised and grouped into the following five main issue types identified in the *State significant infrastructure guidelines – preparing a submissions report, Appendix C to the State significant infrastructure guidelines*, (DPHI, 2024c):

- the project (such as the design, construction approach, timing, and operation and construction areas)
- procedural matters (such as community and stakeholder engagement, EIS adequacy and identification of relevant statutory requirements)
- environmental, social and economic impacts (such as land use, biodiversity, amenity, social and cumulative impacts)
- justification and evaluation of the project
- issues beyond the scope of the project.

Each issue type was divided into key issues and further categorised into sub-issues. For example, a submission relating to construction noise impacts at a residential receiver would be categorised as the environmental, social and economic impacts main issue type. The key issue would be noise and vibration; and the sub-issue would be categorised as construction noise. The naming and selection of key issues and sub-issues for each main issue type was based on the structure of the EIS and the issues being raised.

2.2.2 Summary of issues raised in community submissions

A breakdown of the key issues raised by the community is provided in *Table 2-2* and shown in *Figure 2-1* of this Submissions Report. The top five key issues raised by the community were:

1. social, primarily relating to impacts on community, health and wellbeing and impacts on accessibility and livelihoods and how these impacts would be managed
2. hazards and risks, primarily relating to the increased risk of bushfires and impacts to firefighting operations, risks associated with electric and magnetic fields and aviation safety
3. biodiversity, primarily relating to the magnitude of biodiversity impacts, e.g. the extent of clearing and impacts to threatened species and ecological communities, and the methodology used in the assessment
4. alternatives and options, primarily relating to the transmission line alignment alternatives and route selection
5. engagement, primarily relating to the consultation during project development and future community and stakeholder engagement.

Table 2-2 Summary of key issues raised in community submissions

Issue type	Issue	Number of submissions which raised this issue	Percentage of submissions which raised this issue
The project	Alternatives and options	52	8.4
	Project description construction	12	1.9
Procedural matters	Engagement	52	8.4
	Statutory context	7	1.1
Environmental, social and economic impacts	Social	76	12.2
	Hazards and risks	73	11.8
	Biodiversity	60	9.7
	Traffic and transport	51	8.2
	Other matters	41	6.6
	Landscape and visual	38	6.1
	Agriculture	24	3.9
	Noise and vibration	24	3.9
	Surface water	16	2.6
	Land use and property	15	2.4
	Soils and contamination	10	1.6

Issue type	Issue	Number of submissions which raised this issue	Percentage of submissions which raised this issue
	Aboriginal heritage	6	1.0
	Cumulative impacts	5	0.8
	Historic heritage	2	0.3
Justification and evaluation of the project	Justification and conclusion	34	5.5
Issues beyond the scope of the project	Other	23	3.7

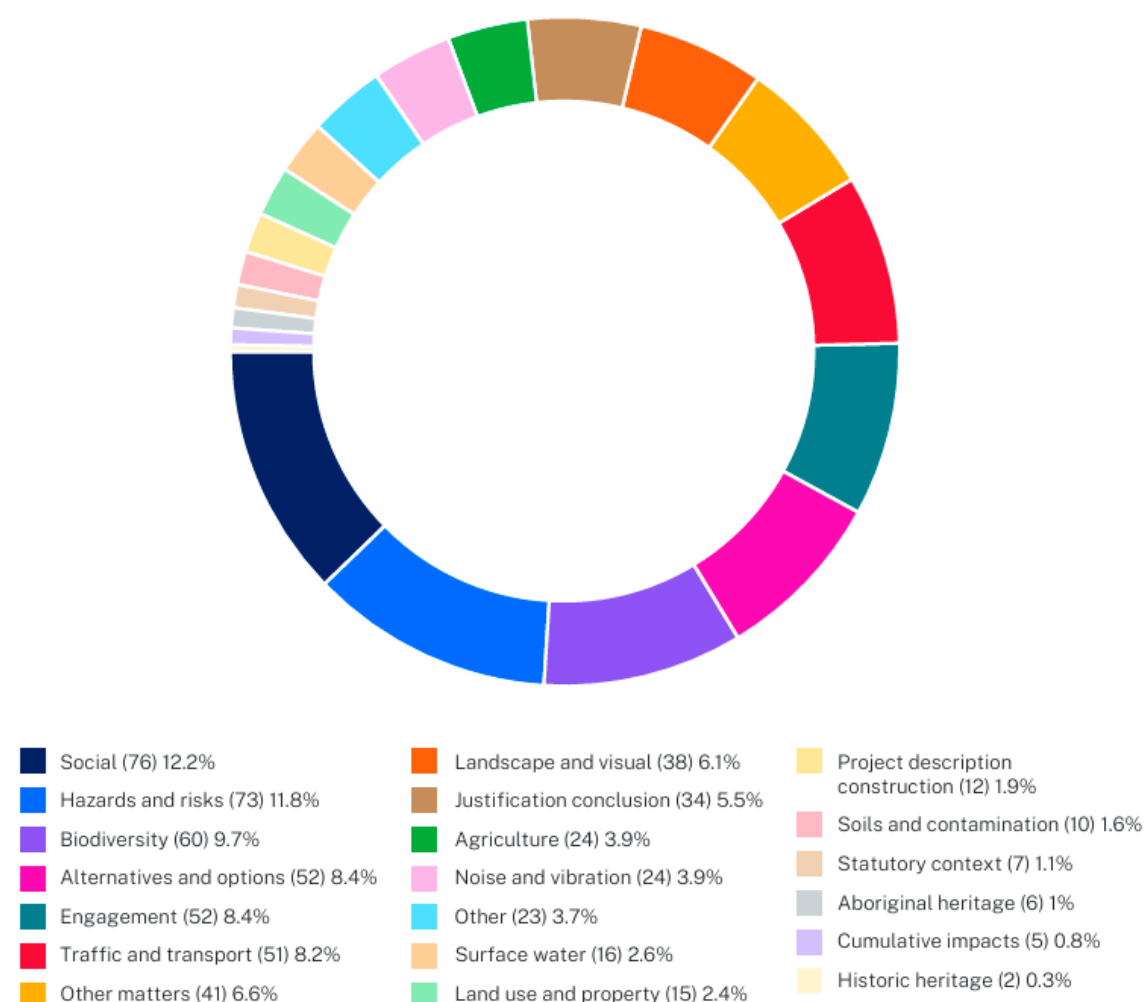


Figure 2-1 Graphical representation of key issues raised in community submissions

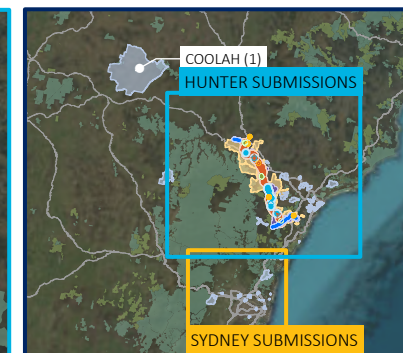
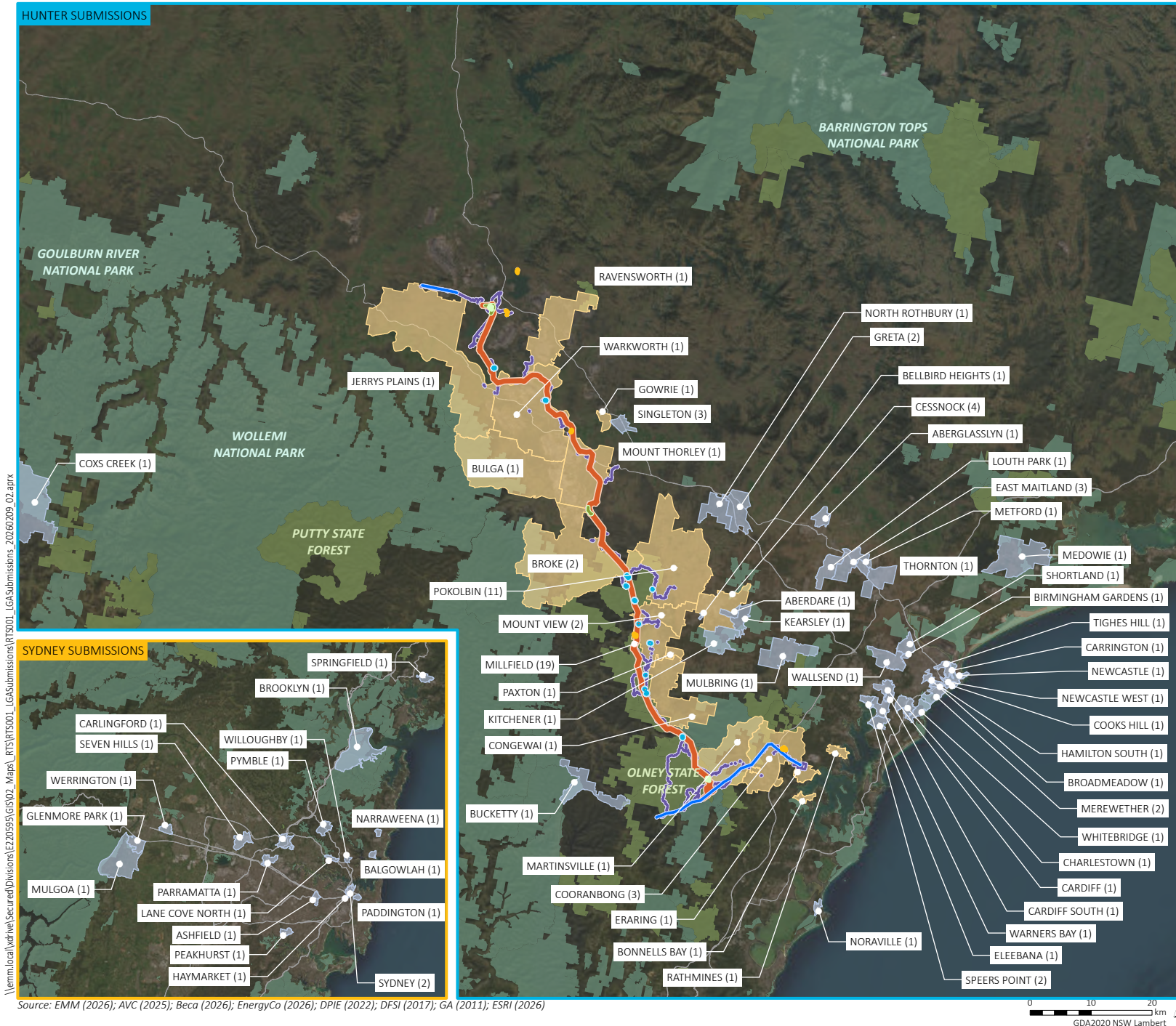
2.2.3 Location of community submissions

Community submissions were received from around Australia with:

- 145 submissions from NSW
- 11 submissions from Victoria
- seven submissions from Queensland
- one submission from Tasmania
- one submission from South Australia.

One submission was also received from a previous resident of the local area who now resides in New Zealand.

Most of the submissions (62) were received from the regional area (between five and 100 kilometres from the project), with 53 submissions received from the local area (less than five kilometres from the project), and 30 submissions received from the broader community in NSW, as shown in *Figure 2-2*.



Community submissions from local and regional area

Hunter Transmission Project
Submissions Report Figure 2-2



EnergyCo

2.3 Government submissions

2.3.1 Approach to analysing government submissions

The government submissions were reviewed, and the issues raised in each submission were presented, broadly according to the order provided in each submission. In some instances, related issues were grouped under a single topic.

The issues raised in each submission, and responses to these issues, are provided per submitter in *Chapter 7 (Response to local council submissions)* and *Chapter 8 (Response to government submissions)* of this Submission Report.

Where relevant, input to the responses was sought from the technical specialists who assisted with preparing the EIS.

2.3.2 Summary of government submissions

A total of 23 submissions were received from government, including four from local councils and 19 from State Government and Australian Government departments/agencies. A list of submissions received from government and where these have been addressed in this Submissions Report is provided in *Table 2-3* of this Submissions Report.

Table 2-3 Submissions received from government and where these have been addressed

Submission category	Submitter	Where this submission has been addressed in this report
Local councils	Cessnock City Council	Section 7.1
	Lake Macquarie City Council	Section 7.2
	Muswellbrook Shire Council	Section 7.3
	Singleton Council	Section 7.4
NSW Government	Department of Climate Change, Energy, the Environment and Water (DCCEEW) – Environment and Heritage NSW	Section 8.1, Section 8.2
	DCCEEW – Conservation, Programs, Heritage and Regulation	Section 8.3
	DCCEEW – Water	Section 8.4
	NSW Environment Protection Authority	Section 8.5
	National Parks and Wildlife Service	Section 8.6
	DPHI – Hazards	Section 8.7
	Department of Primary Industries and Regional Development – Agriculture	Section 8.8

Submission category	Submitter	Where this submission has been addressed in this report
	Department of Primary Industries and Regional Development – Fisheries	<i>Section 8.9</i>
	Department of Primary Industries and Regional Development – NSW Resources	<i>Section 8.10</i>
	Transport for NSW	<i>Section 8.11</i>
	Forestry Corporation of NSW	<i>Section 8.13</i>
	Fire and Rescue NSW	<i>Section 8.14</i>
	NSW Rural Fire Service	<i>Section 8.15</i>
	Subsidence Advisory NSW	<i>Section 8.18</i>
	Water NSW	<i>Section 8.19</i>
	Hunter Water	<i>Section 8.20</i>
Australian Government	Department of Defence	<i>Section 8.12</i>
	Civil Aviation Safety Authority	<i>Section 8.16</i>
	Airservices Australia	<i>Section 8.17</i>

3

Actions taken since exhibition

3 Actions taken since exhibition

This chapter provides a summary of the changes to the project and further assessment of impacts that has been carried out since exhibition of the environmental impact statement (EIS).

3.1 Project amendments and refinements

An application for approval of a State significant infrastructure (SSI) project (including a critical State significant infrastructure (CSSI) project) may, with the approval of the Secretary of the NSW Department of Planning, Housing and Infrastructure (DPHI), and in accordance with Section 179(2) of the Environmental Planning and Assessment Regulation 2021, be amended before it is determined.

In response to issues raised in the submissions, stakeholder feedback received before and during the public exhibition, further design development and feedback provided by design and construct tenderers for the project, several amendments and refinements have been made to the exhibited project.

An Amendment Report has been prepared to assess the amendments and refinements to the exhibited project and whether any changes to the mitigation measures are required as a result of the amendments and refinements. The mitigation measures have been updated to respond to the issues raised in submissions as well. The full list of updated mitigation measures is provided in *Appendix D (Updated mitigation measures)* of the Amendment Report.

The amendments and refinements to the exhibited project are outlined in *Table 3-1* of this Submissions Report with further detail provided in *Chapter 3 (Description of amendments and refinements)* of the Amendment Report.

The project description, provided in *Chapter 4 (Project description)* of the EIS has been updated taking into account the proposed amendments and refinements. The amended project description is provided in *Appendix A (Updated project description)* of the Amendment Report.

Table 3-1 Description of proposed amendments and refinements compared to the exhibited project

Project feature	Amendment / refinement	Summary of exhibited project	Summary of amendment/refinement
Amendments			
Changes to 500 kV transmission line infrastructure	Realignment of the transmission line at Mount Thorley	The transmission line alignment between Bulga and Mount Thorley was designed to utilise mining-owned land wherever feasible and avoid the designated conservation offset area associated with the Bulga mining complex. To address safety concerns related to major hazardous facilities, the transmission line alignment has been developed to establish a safe minimum distance from facilities (Enaex and Dyno Nobel) in Mount Thorley Industrial Estate. Further refinements within Mount Thorley-Warkworth mining complex land, adjacent to the Golden Highway, shifted the transmission line alignment away from the Hunter River, further west. This adjustment allowed tower foundations to be sited in areas with reduced peak flood depths and velocities, improving resilience during flood events.	Around four kilometres of the new 500 kV double circuit transmission line at Mount Thorley has been realigned, moving it up to around 900 metres further south and away from the Hunter River. This proposed realignment of the transmission line at Mount Thorley has been developed with input from the directly impacted landowners and stakeholders and would involve the transmission line continuing south adjacent to the Whittingham to Mount Thorley rail line before deviating in an eastward direction to join the exhibited HTP corridor north of the Putty Road / Broke Road intersection.
	Realignment of the transmission line at Gouldsville	The transmission line alignment in Gouldsville was designed to avoid impacts on high-quality threatened ecological communities through co-location with existing electrical infrastructure easements and access tracks.	Around one kilometre of the new 500 kV double circuit transmission line at Gouldsville would be realigned, moving it slightly south towards Long Point Road West and Gouldsville Road. This proposed realignment has been developed to further minimise impacts to threatened ecological communities, including the Central Hunter Grey Box – Ironbark Woodland threatened ecological community, listed as endangered under the NSW <i>Biodiversity Conservation Act 2016</i> (BC Act).

Project feature	Amendment / refinement	Summary of exhibited project	Summary of amendment/refinement
	Localised easement widening for conductor swing	Section 4.5.1 of the EIS outlines that the operation of the transmission line would occur in a permanent 70-metre-wide easement.	Further development of the project design has identified localised areas of the transmission line easement where the span of conductors between transmission towers would 'swing' during periods of high wind, to a point where there is the potential that during these situations the conductors would extend outside of the 70-metre-wide operational easement. In consultation with Transgrid (as the preferred network operator for the project), the exhibited 70-metre-wide transmission line easement has been widened to be between 80 metres and around 140 metres wide in certain locations so that the transmission line assets stay wholly within the operational easement for the project.
Changes to substation infrastructure	Changes at Eraring substation	Section 4.2.3 in the EIS provides a general overview of the proposed upgrades at Eraring substation, which include: • expansion of the substation to accommodate the installation of new transformers • relocating generator connections from Eraring Power Station and installation/replacement of associated switchgear as required • relocation of the existing transformer spare unit • installation of new 500 kV/330 kV transformer units, augmentation of 500 kV/330 kV bays and associated switchgear and connections	At Eraring substation, the amended project proposes to include: • a larger footprint for constructability, including for parking and the adjustment of utilities • substation generator connections on the existing hardstand area • modification works on the existing bench • new poles and adjustment of the existing generator connections into Eraring Power Station • localised undergrounding of the optical ground wire route by trenching between existing transmission towers.

Project feature	Amendment / refinement	Summary of exhibited project	Summary of amendment/refinement
		adjustments to existing utilities and drainage infrastructure to accommodate the proposed substation expansion.	
Changes to intersections, access roads and access tracks	Changes to access tracks	Access requirements for construction and operation of the project were described in <i>section 4.3.5</i> of the EIS. Based on the concept design and early construction planning, potential access routes, including access roads and access tracks, were identified and are listed in <i>Table 4-7</i> and shown in <i>Figure 4-10</i> of the EIS.	The amended project includes changes to access tracks proposed for use during construction and operation of the project, which have been identified through ongoing development of the project design and feedback received through consultation with landowners, stakeholders and government agencies. Construction of additional/changed sections of access tracks would be consistent with the construction methodology outlined in <i>section 4.3.5</i> of the EIS. Changes to access tracks would be: - within State forests to provide a more suitable route for construction vehicles, improve access to the HTP corridor for clearing, and avoid the need to cross riparian zones - within Olney State Forest to minimise impacts to several threatened amphibian species and their habitat - on land that forms part of the Bulga mining complex to avoid a clean water diversion, keep access for the project separate from access to the mining complex, and avoid direct impacts to existing biodiversity offset areas - for the upgrades to existing transmission lines and towers to ensure access tracks are fit for purpose and to reduce impacts to landowners

Project feature	Amendment / refinement	Summary of exhibited project	Summary of amendment/refinement
			off Putty Road to access the proposed realignment of the transmission line at Mount Thorley.
	Minor adjustments to the project impact area for intersection upgrades	Section 4.3.5 of the EIS noted that the project would rely on the use of existing public roads during construction and operation of the project. In several locations along the construction routes, upgrade works would be required, including at several intersections (which were listed in <i>Table 4-10</i> of the EIS), to cater safely for the proposed construction traffic volumes and delivery of oversized equipment or construction material and ensure public road safety.	The assessment of the amended project identified the need for an additional intersection upgrade at the Jerrys Plains Road southbound off ramp / existing access track at Mount Thorley, because of the changes to the access tracks associated with the change to the transmission line alignment at Mount Thorley. In addition, revised turn warrant assessments were completed for the intersections required to be used for the construction of the project, which identified the need for different intersection treatments than what was included in the EIS for five intersections. This includes: - Freemans Drive / Martinsville Road (intersection ID I-23) – additional land acquisition to accommodate turning vehicle movements - Cessnock Road / new access track (intersection ID I-37) – widening on Cessnock Road for acceleration and deceleration lanes - Long Point Road West / existing easement (intersection ID I-40) – a merge lane as part of the intersection upgrade - Golden Highway / Gouldsville Road (intersection ID I-07), to incorporate a channelised right hand turn.

Project feature	Amendment / refinement	Summary of exhibited project	Summary of amendment/refinement
			The need for different intersection treatments has resulted in minor adjustments to the project impact area.
	Adjustments to the proposed access routes for construction	<i>Table 4-7</i> of the EIS provided a summary of the proposed access routes to be used for construction of the project. This list was based on the concept design for the project and early construction planning.	Adjustments to the proposed access routes to be used for construction have been made following a review of the proposed construction methodology for the project. This included the addition of some construction routes now required and the removal of some construction routes no longer required. The complete list of proposed access routes for construction is provided in <i>Table A-7</i> of the updated project description (refer to <i>Appendix A (Updated project description)</i> of the Amendment Report.
Changes to construction methods and facilities	Reconfiguration of construction support sites and temporary worker accommodation	<i>Section 4.3.6</i> and <i>section 4.3.7</i> of the EIS describes the construction support sites and temporary worker accommodation that would be established to support the construction of the HTP. The EIS assumed a peak construction workforce of 830 workers, with allowance for 780 workers to be housed in temporary worker accommodation at the Hebden Road, Gouldsville Road and Freemans Drive construction support sites.	Further consideration of the construction methodology for the project along with feedback received during exhibition of the EIS has identified the need to: - remove provisions for temporary worker accommodation facilities at the Gouldsville Road construction support site - reconfigure the Wollombi Road construction support site to include temporary worker accommodation with capacity to house up to 300 workers.

Project feature	Amendment / refinement	Summary of exhibited project	Summary of amendment/refinement
			Consistent with other temporary worker accommodation facilities for the project, the temporary worker accommodation at Wollombi Road would be operational 24 hours per day seven days per week. The amended project would therefore include a change in construction activities proposed to be carried out at both the Gouldsville Road construction support site and the Wollombi Road construction support site. At Gouldsville Road, this would include a decrease in light vehicle movements in and out of the construction support site and reduced operating hours. At the Wollombi Road construction support site, this would include an increase in light vehicle movements in and out of the construction support site and extended operating hours at the construction support site, resulting in potential changes to amenity impacts. This amendment would not change the assumed peak construction workforce.

Project feature	Amendment / refinement	Summary of exhibited project	Summary of amendment/refinement
	Changes to laydown areas within State forests	Figure 4-2 of the EIS shows the locations of laydown areas located outside the HTP corridor. Laydown areas identified in the EIS as being located within the State forests include: • Broken Back Road in Cedar Creek • Campbell Spring Trail in Cedar Creek • Trig Road / Mf1 Road in Corrabare • Trig Road / Crumps Road in Corrabare • Wollombi Forest Road in Ravensdale.	Feedback received from the Forestry Corporation of NSW (FCNSW) during continued development of the project design identified an alternative arrangement of laydown areas for construction within the State forests. As a result, the amended project includes: • removal of the laydown areas included in the EIS near: – the intersection of Trig Road / Mf1 Road / North Road in Corrabare State Forest – Wollombi Forest Road (south of Halls Road) in the State Forest of the Watagan Mountains • inclusion of two new laydown areas within the State forests, located near: – the Trig Road / Flick Road intersection in the Corrabare State Forest – the Watagan Creek Road / Burma Road intersection in the State Forest of the Watagan Mountains. These new laydown areas would perform the same functions as laydown areas described in the EIS. However, they would result in changes to the project impact area and disturbance area compared to the EIS.

Project feature	Amendment / refinement	Summary of exhibited project	Summary of amendment/refinement
			Laydown areas would remain as included in the exhibited EIS at: • Broken Back Road in Cedar Creek • Campbell Spring Trail in Cedar Creek Wollombi Forest Road in Ravensdale.
	Reconfiguration of the Flick Road emergency helicopter landing area in response to feedback received from FCNSW	The construction methodology described in the exhibited EIS noted the project would include the provision of emergency helipads at laydown areas on Wollombi Forest Road and Flick Road for helicopters to land in the event of an emergency.	Continued construction planning and consultation with Forestry Corporation of NSW identified that the arrangement of the emergency helicopter landing site along Flick Road would need to be reconfigured so that its design complements the natural site topography and terrain. As such, the amended project would include the reconfiguration of the emergency helicopter landing site at Flick Road. The amended Flick Road emergency helicopter landing site would result in a change in the disturbance area and project impact area.

Project feature	Amendment / refinement	Summary of exhibited project	Summary of amendment/refinement
	Removal of stringing site in Olney State Forest to minimise impacts to threatened amphibian species	Section 4.3.2 of the EIS outlines the work that would be carried out within the HTP corridor, which includes stringing sites. It is noted that stringing sites would be used for the preparation, assembly and operation of stringing equipment to connect the transmission line to the towers. Stringing sites would be positioned along the HTP corridor at various locations, including in the Olney State Forest north of the Olney switching station.	In response to consultation carried out with species experts and regulators for the biodiversity assessment of the project, refinements to the project to reduce the extent of vegetation clearing have been made within the exhibited HTP corridor in the Olney State Forest to the north of the proposed Olney switching station. These changes have been made to minimise impacts to threatened species, particularly frog species such as the Littlejohn's Tree Frog, within the Olney State Forest. As a result of these changes, the proposed stringing site to the north of the Olney switching station has been removed to minimise disturbance in this location. Alternative construction methodologies would be implemented to connect the transmission line to the towers at this location.
	Changes to construction plant and equipment types and locations	Section 4.4.2 of the EIS outlines the plant and equipment required as part of construction for the project.	It is proposed to amend the list of plant and equipment required during construction of the project to also include the following: • diesel generators located at construction support sites and laydown areas • crushing and screening plant located at construction support sites and at laydown areas within State forests • washdown facilities located at construction support sites • wastewater treatment plants at construction support sites.

Project feature	Amendment / refinement	Summary of exhibited project	Summary of amendment/refinement
			These additional plant and equipment have been added to the proposed list to be used during construction in response to feedback from potential construction contractors.
Refinements			
Changes to substation infrastructure	Minor changes at Bayswater substation	Section 4.2.3 of the EIS includes a general overview of the proposed upgrades to the Bayswater substation as part of the project, including: works within the substation to trench and connect communications infrastructure to Bayswater South switching station via underground fibre cable modifications and upgrades to protection, control, automation and communication equipment. Section 4.2.3 of the EIS also includes a general overview of the proposed construction of Bayswater South switching station. Space would be provided at Bayswater South switching station to allow for additional switching station infrastructure, such as additional line shunt reactors and switching station bays, and connections for additional transmission lines in the future.	Based on continued development of the project design, it has been identified that the project is required to include an underground fibre optic communication connection between the Bayswater substation and the Bayswater South switching station. As part of the amended project, this underground fibre optic connection would be located in a trench within the exhibited HTP corridor. The trench would require excavation of about 200 metres in length and would be around 0.6 metres wide and one metre deep. Changes would also include the fitout of two additional switching bays at Bayswater South switching station. This would occur within the exhibited footprint of the Bayswater South switching station.

Project feature	Amendment / refinement	Summary of exhibited project	Summary of amendment/refinement
Changes to construction methods and facilities	Changes to the disturbance area at Olney	As described in <i>section 7.3</i> of the EIS, the assessment of biodiversity impacts includes a disturbance area within the project impact area to provide a more accurate estimation of the likely magnitude of vegetation clearance required, and any associated biodiversity impacts. The disturbance area takes a more precise approach than the project impact area and represents areas of direct impacts such as full clearing at transmission towers and partial clearing within the transmission line easement. This approach was adopted to avoid a substantial overestimation of the likely biodiversity impacts and the associated quantity of biodiversity offsets required.	In response to consultation carried out with species experts and regulators for the biodiversity assessment of the project, refinements to the project to reduce to the extent of vegetation clearing have been made within the exhibited HTP corridor in the Olney State Forest to the north of the proposed Olney switching station. These changes have been made to minimise impacts to threatened species and their habitat, particularly several amphibian species within the Olney State Forest, including the Littlejohn's Tree Frog. These refinements within Olney State Forest have included adjustments to the disturbance area used to assess the potential impacts to biodiversity. While changes have been made to the disturbance area at this location, the HTP corridor would remain the same within the Olney State Forest as the EIS, and the same approach to vegetation management in the disturbance area as the EIS would apply.

3.2 Additional assessments

The Amendment Report describes the proposed amendments and refinements to the project since the exhibition of the EIS and provides an assessment of the potential impacts of the amended project.

The proposed amendments and refinements were evaluated to determine if they would result in any changes to the impacts described in the EIS, and if any changes to the mitigation measures are required. The assessment was informed by additional impact assessments for key issues where potential changes to impacts were identified, including biodiversity, heritage, landscape character and visual amenity, traffic and transport, social, noise and vibration, flooding and bushfire risk.

The following revised and addendum technical papers are included in the Amendment Report:

- *Appendix E (Revised biodiversity development assessment report)*
- *Appendix F (Aboriginal cultural heritage assessment addendum)*
- *Appendix G (Landscape character and visual impact assessment addendum)*
- *Appendix H (Revised traffic and transport impact assessment)*
- *Appendix I (Social impact assessment addendum)*
- *Appendix J (Historic heritage impact statement addendum)*
- *Appendix K (Noise and vibration impact assessment addendum)*
- *Appendix L (Flooding impact assessment addendum)*
- *Appendix M (Bushfire risk assessment addendum).*

Other assessment matters, that required less additional assessment in relation to the amendments and refinements including land use and property, agriculture, surface water, groundwater, soils and contamination, air quality, greenhouse gas, economics, and cumulative impacts, are addressed within the main body of the Amendment Report.

4

Engagement

4 Engagement

This chapter provides an overview of engagement undertaken during and following public exhibition of the environmental impact statement (EIS).

4.1 Engagement purpose

Since late 2022, EnergyCo has worked closely with communities, landowners, councils, agencies and stakeholders to shape, refine and assess the Hunter Transmission Project (HTP, the project) in accordance with statutory planning and assessment requirements.

Engagement undertaken during and after the EIS exhibition directly informed the matters addressed in the Submissions Report as well as the amendments and refinements assessed in the Amendment Report.

4.2 Engagement program overview (2022–February 2026)

EnergyCo’s engagement has evolved from early investigations and corridor selection to detailed environmental assessment, exhibition, submissions management and technical refinement. A summary of the engagement undertaken since 2022 is provided in *Table 4-1* of this Submissions Report.

Table 4-1 Engagement program overview (2022-2026)

Indicator	Volume
Conversations and interactions	4,000+
People and organisations engaged	1,100+
Community pop-ups and events	310
Stakeholder meetings and briefings	416
Public information sessions and webinars	14

Note: These metrics reflect cumulative engagement activity across the project lifecycle and include statutory, non-statutory and issue-driven consultation.

This engagement has combined broad-based community awareness with intensive, issue-driven engagement with those most directly affected, including landowners, councils, Aboriginal stakeholders, environmental groups, recreational users, businesses and government agencies.

Engagement activity increased significantly during the EIS exhibition (August to September 2025) where EnergyCo focused on:

- supporting informed submissions through high visibility public communication and accessible information tools
- working directly with affected stakeholders to clarify issues and provide additional technical information
- using engagement to test, refine and validate design and mitigation options before they were included in the Amendment Report.

During the subsequent post exhibition phase (October 2025 to February 2026), EnergyCo focused on:

- communicating and engaging on the submissions made on the exhibited EIS
- communicating and engaging on proposed amendments to the project as exhibited in the EIS
- targeted engagement with directly affected stakeholders including community, landowners, councils and agencies
- responding to feedback on project amendments including proposed commitments to manage residual impacts.

4.2.1 Engagement undertaken during EIS exhibition (27 August to 24 September 2025)

The EIS was placed on public exhibition by the NSW Department of Planning, Housing and Infrastructure (DPHI) from 27 August to 24 September 2025. The exhibition represented a key statutory milestone under the NSW *Environmental Planning and Assessment Act 1979* (EP&A Act). During this period, EnergyCo was actively present across the corridor – explaining the project, answering questions, and listening to local voices.

The exhibition engagement program was designed to make complex technical information clear and accessible, while capturing feedback that would help shape the project's next stage. Engagement was designed not simply to meet statutory notification requirements, but to support meaningful participation by landowners, community members, councils, Aboriginal stakeholders, environmental groups, recreational users, businesses, State and Australian government agencies and other stakeholders.

To maximise awareness and access, EnergyCo implemented a coordinated, multi-channel communications and engagement program. This included:

- a Digital EIS and interactive map on the EnergyCo website
- eight fact sheets and a submission guide
- radio advertising across the Hunter and Central Coast
- social and digital advertising
- eNewsletters to registered stakeholders
- direct emails to councils, Members of Parliament (MPs), Aboriginal stakeholders, schools, and environmental and recreational groups
- emails and letterbox notifications to directly affected landowners and neighbours along the corridor.

Hard-copies of the HTP EIS were also made available at five public locations (including council offices and libraries) and at all in-person engagement events, ensuring access for people without reliable digital connectivity.

Between 27 August and 24 September 2025, EnergyCo provided multiple ways for people to get involved, including pop-up information stands, community information sessions, webinars, direct mail, phone and email contact, and digital tools. This ensured that both digitally connected stakeholders and those who preferred face-to-face or paper-based engagement could access the exhibited material and provide feedback.

This engagement was undertaken alongside the statutory submissions process administered by DPHI via the NSW Planning Portal.

Issues raised through direct engagement did not replace formal submissions but were considered in parallel and addressed through this Submissions Report and Amendment Report. Engagement effort was applied proportionately, with the depth and intensity of engagement scaled to the relevance of issues to amended project elements and the level of potential impact.

Seven community sessions and four pop-ups were held across key towns and regional centres along the corridor, including Cessnock, Singleton, Cooranbong, Millfield, Muswellbrook and Maitland, as well as at regional markets and community events. In addition to this, EnergyCo attended over 40 landowner briefings.

Three webinars were delivered during the EIS exhibition to support community understanding of the exhibited project and how to make submissions. Separate webinars delivered after exhibition were specifically focused on amended project elements and the associated technical assessments documented in the Amendment Report.

In addition to face-to-face engagement, the exhibition achieved strong digital reach. During the exhibition period, the Digital EIS portal recorded 519 unique visitors and 828 user sessions. More than 2,000 stakeholders received eNewsletters, approximately 1,000 near-neighbour letters were distributed to households along the corridor, and more than 400 direct emails were issued to key stakeholder groups, supporting broad awareness and informed participation.

4.2.2 What community told us during EIS exhibition

Feedback received during exhibition reflected strong community interest and a wide range of local concerns. The specific issues raised by community members and stakeholders through engagement during public exhibition of the EIS is summarised in *Table 4-2* of this Submissions Report.

Discussion of these issues informed the scoping of additional technical investigations as well as the amendments and refinements assessed in the Amendment Report.

Table 4-2 Issues raised by community members and stakeholders during public exhibition

Theme	Issues raised
Landscape and visual impacts	Towers in elevated and scenic areas, impacts on tourism routes and line-of-sight from homes and lookouts
Traffic and haulage	Construction traffic volumes, safety on narrow rural roads, bridge and culvert capacity, oversize and overmass vehicle movements, emergency access
Bushfire risk	Fire ignition potential, access to water sources, impacts to emergency response protocols and evacuation routes
Environment and biodiversity	Impacts on threatened species particularly frogs within the Olney State Forest area, habitat fragmentation, vegetation clearing and cumulative impacts
Property access	Easements, access tracks, farm operations and day-to-day land use
Property acquisition	Fairness, timing, financial impacts and long-term implications for livelihoods
Community engagement	Requests for more information, clearer updates and access to technical specialists

4.2.3 Engagement since EIS exhibition (25 September 2025 to February 2026)

Following the close of exhibition, EnergyCo implemented a structured and intensive post-exhibition engagement program to actively work through issues raised in submissions while the Submissions Report and Amendment Report were being prepared. This phase was designed to move beyond general feedback and into detailed, issue-based engagement with those most affected by, or responsible for, key project impacts.

The purpose of this phase was to:

- clarify and validate issues raised through formal submissions
- provide additional technical information where required
- test emerging amendment and refinement options with affected stakeholders
- maintain transparency while statutory reporting and technical investigations progressed.

This ensured that engagement did not pause when exhibition of the EIS ended, but instead intensified during the critical period when alignment, access, biodiversity, heritage and construction methodologies were being refined for assessment in the Amendment Report. This phase focused on issue-based engagement with stakeholders directly affected by, or responsible for, matters raised in submissions.

4.2.4 How engagement was targeted after EIS exhibition

Engagement during this period was targeted to directly inform the assessment of the amended project elements in the Amendment Report:

- local councils were engaged through frequent officer-level and executive-level meetings, workshops and technical briefings focused on construction traffic, road capacity, bridge and culvert constraints, construction access routes, laydown areas, workforce accommodation and cumulative impacts. Council feedback directly informed refinements to construction access routes, road upgrade requirements, the location and operation of construction support sites, and staging and traffic management measures assessed in the Amendment Report
- Aboriginal stakeholders and Registered Aboriginal Parties were engaged through meetings, site inspections and ongoing correspondence on Aboriginal cultural heritage, field surveys, land access and heritage management. These discussions informed the scope of additional heritage surveys, the refinement of site boundaries and avoidance measures, and the development of heritage management and participation frameworks that are documented in the Amendment Report
- environmental and special-interest groups were engaged through targeted briefings and issue-specific discussions on threatened species, habitat connectivity, vegetation clearing, offsets and construction impacts. Their input contributed to refinements to clearing footprints, biodiversity mitigation measures, offset strategies and the assessment of cumulative impacts reflected in the Amendment Report
- landowners and near-neighbours were engaged through property-based meetings, site inspections, phone calls and written follow-up on access tracks, easements, construction interfaces, acquisition pathways and long-term land use. This engagement informed alignment adjustments, refinements to access tracks and easement widths, and the identification of additional mitigation measures proposed in the Amendment Report
- government agencies were engaged through meetings, correspondence and technical exchanges on biodiversity, heritage, transport, emergency management and compliance matters raised in submissions. Agency feedback informed the scope and methodology of the technical investigations, the treatment of cumulative impacts, and the design and mitigation measures assessed in the Amendment Report.

4.2.5 Engagement on submissions and Amendment Report outcomes

Engagement was undertaken following the close of the EIS exhibition and the finalisation of the Submissions Report and Amendment Report. The purpose of this engagement was to ensure that the issues raised were not only responded to, but tested, localised, and translated into assessment scope, design amendments and refinements, and mitigation outcomes where relevant.

Issues addressed during this phase were identified through:

- formal submissions made during the public exhibition of the EIS
- direct engagement with stakeholders during the exhibition of the EIS
- post-exhibition correspondence, meetings and issue-specific follow-up with councils, agencies, Aboriginal stakeholders, organisations, community groups and directly affected landowners.

This phase of engagement was designed to ensure continuity and traceability between:

- what was heard during exhibition and through submissions
- the targeted engagement and technical investigations undertaken post-exhibition
- the outcomes documented in the Amendment Report (amended project elements, strengthened assessment and/or mitigation measures), and response chapters (*Chapters 5 to 8*) of this Submissions Report.

Stakeholder engagement status

EnergyCo differentiated between stakeholders with established pre-exhibition engagement and those whose primary interaction occurred through submissions, to ensure engagement effort was proportionate, targeted and focused on issue resolution, rather than duplicating consultation already undertaken.

Stakeholders with established engagement channels included local councils, key agencies/departments, Forestry Corporation of NSW (FCNSW), NSW Rural Fire Service, Registered Aboriginal Parties and Aboriginal stakeholders, environmental and wildlife organisations (including Hunter Wildlife Rescue), and directly affected landowners and near-neighbours. Post-exhibition engagement with these stakeholders focused on progressing matters already raised, validating assumptions underpinning refinements, and confirming how issues would be addressed through amended project elements, assessment scope, mitigation and ongoing commitments.

Those stakeholders engaged primarily through submissions and post-exhibition correspondence were identified on the basis that they had raised issues previously and to confirm their relevance to project amendments and explain how matters would be addressed through the Submissions Report and Amendment Report response framework (including *Chapters 5 to 8* of this Submissions Report) (refer to *Table 4-3* of this Submissions Report).

Table 4-3 Stakeholder engagement timing and primary focus

Stakeholder / organisation	Pre-exhibition engagement	Submission / advice received	Post-exhibition engagement undertaken	Primary focus and where addressed in this Submissions Report
Cessnock City Council	✓	✓	✓	Construction access, construction support site impacts (specifically Wollombi Road), traffic and amenity – addressed in <i>Chapter 7</i>
Muswellbrook Shire Council	✓	✓	✓	Alignment refinement at Mount Thorley, land use, traffic impacts, legacy housing and flooding/interface – addressed in <i>Chapter 7</i>

Stakeholder / organisation	Pre-exhibition engagement	Submission / advice received	Post-exhibition engagement undertaken	Primary focus and where addressed in this Submissions Report
Singleton Shire Council	✓	✓	✓	Land use compatibility, biodiversity, aviation/airspace interface – addressed in <i>Chapter 7</i>
Lake Macquarie City Council	✓	✓	✓	Southern interface and construction impacts – addressed in <i>Chapter 7</i> and Amendment Report assessments
NSW Department of Climate Change, Energy, the Environment and Water (DCCEEW) Heritage NSW	✓	✓	✓	Aboriginal heritage methodology and mitigation – addressed in <i>Chapter 8</i>
		✓	✓	Non-Aboriginal heritage methodology and mitigation – HHIS addendum, outcomes of the Wishing Well and updated mitigation/management approach – addressed in <i>Chapter 8</i>
DCCEEW – Conservation Programs, Heritage and Regulation (CPHR)	✓	✓	✓	Biodiversity assessment methodology and impacts – addressed in Revised BDAR – addressed in <i>Chapter 8</i>
Civil Aviation Safety Authority (CASA)	✓	✓		Aviation assessment approach and response to Hunter Valley Gliding Club – addressed in <i>Chapter 8</i>
Hunter Water	✓	✓	✓	Water supply – addressed in <i>Chapter 8</i>
NSW National Parks and Wildlife Service (NPWS)	✓	✓	✓	Aboriginal heritage, Non-Aboriginal heritage, outcomes of the Wishing Well, biodiversity impacts, traffic and transport bushfire management, NPWS land management – addressed in <i>Chapter 8</i>

Stakeholder / organisation	Pre-exhibition engagement	Submission / advice received	Post-exhibition engagement undertaken	Primary focus and where addressed in this Submissions Report
NSW Environment Protection Authority (EPA)	✓	✓	✓	Noise/air/vibration assessment approach – addressed in <i>Chapter 8</i>
Transport for NSW	✓	✓	✓	OSOM routes, swept paths, further intersection design, cumulative impact assessment and need for more conservative modelling assumptions – addressed in <i>Chapter 8</i>
FCNSW	✓	✓	✓	Vegetation management and bushfire risk, Aboriginal heritage, recreational use of Forest, access tracks, loss of timber resources, operational interface – addressed in <i>Chapter 8</i>
BirdLife Australia	✓	✓	✓	Threatened species / habitat connectivity matters – response and mitigation strengthened – addressed in <i>Chapter 6</i>
Biodiversity Council	✓	✓	✓	Threatened species / offsets / assessment scope and impacts to threatened frog species – addressed in <i>Chapter 6</i>
Business Hunter	✓	✓	✓	Industry/business interface – addressed via organisations framework – addressed in <i>Chapter 6</i>
Hunter Valley Gliding Club / Gliding Australia	✓	✓	✓	Aviation safety/airspace constraints, alignment and tower design locations relative to gliding club, need for risk assessment – addressed in <i>Chapter 6</i>

Stakeholder / organisation	Pre-exhibition engagement	Submission / advice received	Post-exhibition engagement undertaken	Primary focus and where addressed in this Submissions Report
Hunter Wildlife Rescue	✓	✓	✓	Threatened species, assessment approach, mitigation and offsets – addressed in <i>Chapter 6</i>
Millfield Community Association	Formed in early October 2025	✓	✓	Local amenity, traffic and site interface matters – issue-based follow-up and assessment pathways – addressed in <i>Chapter 6</i>
Millfield Public School	-	✓	✓	Engagement, traffic and road safety during construction, amenity impacts, community wellbeing – addressed in <i>Chapter 6</i>
Pokolbin Mountains Road Residents, Landholders and Users Group	✓	✓	✓	Local amenity, traffic and road safety during construction, flooding and impacts to management of vineyards adjacent to road – addressed in <i>Chapter 6</i>

Localisation of issues or specific project elements

Issues raised through submissions and engagement were reviewed, grouped and localised both geographically (by local area and impact pathway) and thematically (by technical discipline) to determine whether they:

- required additional or refined technical assessment and/or strengthened mitigation without changing the project design
- related to aspects of the project unchanged by the amendments, but still required engagement, clarification and response through the Submissions Report and ongoing management frameworks.

This localisation ensured issues were not treated generically across the corridor, but assessed in the context of specific locations, stakeholders and impact pathways. Localisation was undertaken by mapping issues against project elements, relevant impact pathways and local receiver contexts, and then validating priorities through targeted engagement with councils, agencies, Aboriginal stakeholders, landowners and special-interest groups. The outcomes of this process directly informed the prioritisation of post-exhibition engagement and the scope and focus of technical investigations documented in the Amendment Report (refer to *Table 4-4* of this Submissions Report).

Table 4-4 Outcomes of localisation of issues

Issue theme / concern	Raised by (examples)	Localised to specific project element?	How addressed (traceability)
Construction access, traffic and amenity impacts (including construction support sites)	Councils, residents, Millfield Community Association, Pokolbin Mountains Road Residents, Landholders and Users Group, other community groups	✓ (where linked to elements such as support sites/access routes)	Targeted council/community engagement informed assessment scope and mitigation in Amendment Report – detailed responses in <i>Chapters 5 to 7</i>
Aboriginal cultural heritage methodology, site recording and mitigation	Heritage NSW, NPWS, FCNSW, RAPs	✓	Further consultation with relevant parties, Aboriginal cultural heritage assessment (ACHA) addendum prepared; methodology and mitigation updated – addressed in <i>Chapter 8</i>
Historical heritage methodology	Heritage NSW, FCNSW, NPWS	✓	Further consultation with relevant parties, historic heritage impact assessment (HHIA) addendum prepared – methodology strengthened – addressed in <i>Chapter 8</i>
Threatened species, habitat connectivity, offsets and frog habitat (Olney / Olney State Forest context), fauna impacts	CPHR, Hunter Wildlife Rescue, BirdLife Australia, Biodiversity Council, University of Newcastle, community	✓	Revised biodiversity development assessment report (BDAR) prepared and improved commitments for avoidance and minimisation of impacts – addressed in <i>Chapters 6 and 8</i>
Community/landowner alignment and acquisition concerns	Community submissions and landowners	✓	Alignment and access refinements, avoidance measures and acquisition reduction outcomes documented – addressed in <i>Chapter 5</i>
Corridor-wide concerns not tied to project elements (e.g. strategic context / corridor selection principles)	Hunter Valley Gliding Club, Gliding Australia, Community submissions	✗	Addressed through Submissions Report responses (relevant chapters) and ongoing engagement – addressed in <i>Chapters 5 to 6 and 8</i>

Councils, agencies and organisations – engagement outcomes

Local councils raised a combination of corridor-wide and highly localised issues through submissions and officer/executive engagement, including construction traffic and haulage routes, constraints on narrow rural roads, bridge and culvert capacity, construction support sites and temporary worker accommodation, community benefits and legacy outcomes, amenity impacts (noise, lighting and dust), biodiversity interfaces and cumulative impacts.

Council engagement following exhibition was intentionally structured to support issue resolution by:

- validating the location and nature of constraints through council technical input (e.g. road hierarchy, asset condition, bridge limits, flood-prone areas and sensitive receivers)
- confirming where matters raised were being further assessed in the Amendment Report (e.g. construction access routes, the Wollombi Road construction support site and temporary worker accommodation, and localised refinement areas including Mount Thorley)
- identifying and documenting mitigation and management measures to address residual impacts (e.g. traffic management measures, road upgrades and asset protection requirements, construction support site controls, operating hours and amenity mitigation, and commitments to ongoing consultation during detailed design and delivery).

Council engagement following exhibition in relation to key matters raised in submissions and discussion is described in *Chapter 7 (Response to local council submissions)* of this Submissions Report.

Further engagement was also undertaken with government departments and agencies following exhibition. The outcomes of this engagement are detailed in the follow sections of this Submissions Report:

- Department of Climate Change, Energy, the Environment and Water (DCCEEW) – Environment and Heritage NSW – refer to *section 8.1* (Aboriginal heritage) and *section 8.2* (European heritage)
- DCCEEW – Conservation Programs, Heritage and Regulation Group – refer to *section 8.3*
- DCCEEW – Water – refer to *section 8.4*
- National Parks and Wildlife Service – refer to *section 8.6*
- Transport for NSW – refer to *section 8.11*
- Forestry Corporation NSW – refer to *section 8.13*
- Hunter Water – refer to *section 8.20*.

Engagement was also undertaken with Commonwealth DCCEEW to discuss key biodiversity issues including threatened species avoidance, and Warkworth Sands TEC clearing extents. Historic heritage items within the Singleton Military Area were also discussed including the curtilage and visual impacts to Oakley Estate and Murinbin House.

Further engagement was undertaken with a number of organisations and specialist interest groups following exhibition. The key issues raised and outcomes of this engagement are detailed in the following sections of this Submissions Report:

- BirdLife Australia – refer to *section 6.1*
- Biodiversity Council – refer to *section 6.2*
- Business Hunter – refer to *section 6.3*
- Glencore – refer to *section 6.7*

- Hunter Valley Gliding Club – refer to *section 6.11*
- Hunter Valley Operations– refer to *section 6.12*
- Hunter Wildlife Rescue – refer to *section 6.14*
- Millfield Community Association – refer to *section 6.15*
- Millfield Public School – refer to *section 6.16*
- Origin – refer to *section 6.22*
- Pokolbin Mountains Road Residents, Landholders and Users Group – refer to *section 6.23*.

The above sections should be read in conjunction with the relevant technical assessments and mitigation measures presented in the Amendment Report, which collectively provide a clear and traceable pathway from issues raised during exhibition to assessment outcomes and commitments.

4.2.6 Engagement to support the Amendment Report

Since the commencement of the EIS public exhibition, EnergyCo identified amendments and refinements to the HTP to better align with stakeholder feedback and to minimise environmental impacts. A program of technical investigations to assess amendments to the exhibited project was completed. Engagement undertaken between October 2025 and February 2026 supported this work so that community, landowner and stakeholder feedback could directly influence how the amendments were assessed, and mitigation measures developed in the Amendment Report. Engagement was undertaken concurrently with the development of the Amendment Report.

Engagement on amendments and refinements was delivered through a combination of:

- property-based meetings and site inspections with directly affected landowners to review alignment options, access tracks, easement widths, construction interfaces and land use impacts
- council and government agency briefings and workshops to work through traffic, road capacity, bridge and culvert constraints, temporary worker accommodation, cumulative impacts and construction staging
- Aboriginal stakeholder and Registered Aboriginal Party (RAP) consultation, including site discussions, to inform cultural heritage surveys, avoidance strategies, management measures and participation in field investigations
- environmental organisation and wildlife group meetings to review threatened species, habitat connectivity, clearing footprints, offset requirements and construction impacts
- recreational and forestry user briefings on access, closures, detours and safety
- webinars, technical updates and written correspondence with a wider audience.

Table 4-5 of this Submissions Report summarises how this engagement directly informed the Amendment Report.

Table 4-5 How engagement informed the Amendment Report

Amendment	Stakeholders engaged	Issues raised through engagement	How engagement informed the Amendment Report
Realignment of the transmission line at Mount Thorley	Landowners, Mining companies, Muswellbrook Shire Council, surrounding residents	Visual prominence, agricultural land use, interface with mining operations, flooding, biodiversity, access	Feedback from directly affected landowners was considered in decision making regarding the alignment at this location. Engagement helped to identify and prioritise the scope and focus of technical assessment for the amendment, including detailed visual impact assessment, agricultural land use considerations and biodiversity impacts.
Reconfiguration of construction support sites and temporary worker accommodation (Wollombi Road)	Nearby residents, Cessnock Council, Millfield Public School and community groups	Noise, lighting, traffic safety, amenity	Engagement informed the assessment scope and mitigation focus for the amended construction support site, including detailed noise, lighting and traffic assessments and the identification of mitigation measures to minimise amenity impacts.
Changes to access tracks (specifically, Forestry access track adjustments)	FCNSW, recreational groups, Lake Macquarie Council	Interface with forestry operations, safe recreational use of State Forest	These amendments were identified and subsequently refined through engagement with FCNSW. Additional targeted technical assessment and mitigation measures are included in the Amendment Report
Localised easement widening for conductor swing	Landowners and near neighbours, FCNSW	Property impacts, impacts to FCNSW	The amendment arose from technical and safety requirements, with engagement informing how impacts were assessed and mitigated in the Amendment Report.
Changes to laydown areas within State forests	Councils, landowners, neighbours, FCNSW	Traffic, vegetation clearing, noise, air quality, visual screening	The amendment arose from feedback from FCNSW in consideration of operational interface, Aboriginal heritage concerns and recreational use of the area, with engagement informing how impacts were assessed and mitigated in the Amendment Report.

Amendment	Stakeholders engaged	Issues raised through engagement	How engagement informed the Amendment Report
Changes to substation infrastructure	Councils, generators, industry stakeholders	Construction interfaces, staging, operational safety	Feedback contributed to the scope of technical studies and mitigation measures included in the Amendment Report.

Through this process, the Amendment Report documents not only what technical changes were made, but why they were made – including how landowner, council, Aboriginal stakeholder and other stakeholder input shaped the scope, location, design and mitigation measures before they were finalised for assessment.

4.3 Ongoing engagement

Engagement will continue beyond the lodgement of the Submissions Report and Amendment Report to DPHI and through determination, detailed design, construction and operation of the HTP.

Ongoing engagement will play a critical role in managing construction impacts, supporting land access and acquisition processes, responding to community concerns and maintaining trust as the project transitions from planning into delivery.

Ongoing engagement will be governed by:

- EnergyCo's Consultation Manager system, which will continue to provide a formal, auditable record of all stakeholder interactions, issues, actions and closure, supporting compliance, reporting and escalation where required. As the project transitions to the network operator, a different stakeholder management system may be used (such as Salesforce), but the requirement to maintain a formal, auditable stakeholder data-capture and reporting system will continue
- Conditions of Approval (if granted), which will set mandatory requirements for community notification, consultation, complaints management, reporting and independent auditing
- the network operator's community communication strategy, which will detail how engagement is delivered during detailed design, construction and operation, including roles, responsibilities, response timeframes and escalation pathways. The transition to the network operator will not alter the requirement to maintain formal, auditable engagement and reporting processes.

Together, these instruments ensure that engagement is embedded in the governance and delivery of the project.

As the project moves into detailed design and construction, engagement will increasingly focus on:

- outstanding investigations including geotechnical investigations
- preparation of management plans and secondary approvals
- advance notice of works, traffic changes and access arrangements
- property-specific construction interfaces and mitigation measures
- protection of Aboriginal cultural heritage and delivery of heritage management plans

- biodiversity management, vegetation clearing controls and offset delivery
- complaint handling, dispute resolution and rapid response to emerging issues.

Table 4-6 of this Submissions Report identifies ongoing engagement throughout delivery of the project including stakeholder groups, areas of focus and details on how engagement will be delivered.

Engagement will remain issue-driven, locally focused and adaptive, with increasing emphasis on site-specific impacts, real-time communication and rapid resolution of concerns as construction approaches and progresses.

Table 4-6 Ongoing engagement streams

Stakeholder group	Engagement focus	How engagement will be delivered
Landowners, lease holders and near neighbours	Access arrangements, easements, construction timing, property interfaces, acquisition pathways	Regular direct contact, property-based meetings, site inspections, written notifications, advance work notices and issue-driven follow-up, recorded in EnergyCo's Consultation Manager or the network operator's stakeholder management system (such as Salesforce)
Local councils and emergency services	Traffic and transport, bushfire risk, cumulative impacts, local planning and approvals	Scheduled briefings, officer-level technical meetings, General Manager briefings, joint planning sessions and written updates aligned to works programs and design changes
Aboriginal stakeholders and Local Aboriginal Land Councils (LALCs)	Cultural heritage, surveys, employment and heritage management	Ongoing meetings, participation in field surveys, co-development of heritage management plans and involvement in construction-phase decision-making
Environmental organisations	Biodiversity, threatened species, wildlife care	Targeted briefings, technical workshops, access to updated environmental data where relevant
Recreational and forestry users	Access, safety, closures and detours	Direct liaison with user groups, mapping updates, signage and advance notice of access changes
Schools and sensitive receivers	Safety, traffic, noise and amenity	Tailored briefings, information packs, site-specific notifications and ongoing liaison during nearby works
Wider community	Project updates and next steps	Website updates, newsletters, webinars, community events and the 1800 information line

5

Response to community submissions

5 Response to community submissions

This chapter summarises the issues raised in submissions from the general public and provides responses. *Appendix A* of this Submissions Report contains a table identifying community submissions using a unique identifier (ID). The ID of each submission is noted in the relevant section (s) to allow submitters to find the relevant response to their submission. The table in *Appendix A* of this Submissions Report also presents a cross reference to where the issues have been addressed for each submission.

5.1 Alternatives and options

5.1.1 Selection of the preferred route option

Submitter ID numbers

S-92240456, S-92611207, S-94965494, S-94965556, S-94965781, S-94983464, S-94995477, S-95012245, S-95064460, S-95096724

Summary of issues

Submitters commented on the process taken to select the preferred transmission line alignment. Specifically, submitters expressed:

- concerns that the transmission line corridor selection process was rushed and may not have been based on a comprehensive and detailed multi-criteria analysis process
- concerns regarding the perceived lack of a cost-benefit analysis, costed comparison of alternatives or feasibility assessments
- concerns that the transmission line corridor was selected to save time and money rather than its suitability
- request for further justification for the preferred corridor and how it best avoids and minimises impacts on the environment and community
- concerns that not all alternatives have been fully explored, including those suggested by the community
- concerns that the transmission line corridor objectives and criteria have not been consistently adopted, such as the perceived deviation from co-location principles and lack of avoidance of the town of Millfield
- concerns regarding perceived bias towards minimising impacts on landowners (including Defence and certain residential properties) in the corridor selection process

- support for the use of public land for the transmission line corridor
- concern that a decision was made on the chosen route prior to biodiversity assessments being carried out to identify areas of high biodiversity value to avoid.

Response

Approach to selecting the preferred route

Optioneering for the Hunter Transmission Project (HTP, the project) began in late 2021 and continued through to late 2024. Further amendments have been made to the HTP post exhibition of the EIS and these are outlined in the Amendment Report.

A detailed description of the alternatives considered for the project and the justification for the preferred transmission line alignment was provided in *Chapter 3 (Alternatives and options)* of the EIS. The alternatives analysis followed a holistic, multi-criteria assessment that considered impacts to people and the environment, technical feasibility, and cost.

Strategic alternatives were identified and assessed against strategic objectives (i.e. the outcomes the project must achieve to address the project need). Network solutions (in the form of new transmission line infrastructure) met all the strategic objectives and was selected as the preferred strategic alternative for the HTP, as noted in *section 3.1* of the EIS.

Corridor alternatives were identified based on EnergyCo's planning pillars and project objectives developed specifically for the HTP. EnergyCo's key planning pillars guide the corridor selection process for its projects in NSW. These pillars and principles align with the requirements of the *NSW Electricity Infrastructure Investment Act 2020* and were presented in *Table 3.3* of the EIS.

The project objectives included maximising the use of mining land, suitable public land and electricity easements; minimising significant land use conflicts and impacts on people and the environment; minimising hazards and risks; building community support; and delivering the project on time at reasonable cost for consumers. Three strategic corridors were selected (North, Central, South) with 19 route options identified and assessed, as outlined in *section 3.3* of the EIS. Route option South A was selected as the preferred route for the HTP (refer to *section 3.3* and *section 3.4* of the EIS).

Three transmission alignment alternatives (Alignment A, B and C) within route option South A were then assessed against the project objectives and key technical, environmental, community and cost considerations, as outlined in *section 3.5* of the EIS. Alignment A was identified as the preferred alignment for the HTP.

In response to community feedback and further technical and environmental investigations (including biodiversity, heritage, landscape and visual, surface water, flooding and bushfire), several adaptations and improvements were made to the preferred alignment for the project. Ahead of public exhibition of the EIS, EnergyCo published feedback reports including *Shaping the Hunter Transmission Project* in May 2024 and an updated report *Refining the Hunter Transmission Project* in December 2024 to outline the refinement process for the HTP. The refinements were also detailed in *section 3.6* of the EIS.

EnergyCo acknowledges that in some locations competing environmental, social and technical constraints occur. In these instances, EnergyCo has adopted a balanced and transparent approach to determine the most appropriate alignment, ensuring that decisions are informed by data, and in consultation with affected stakeholders.

Cost-benefit analysis

Both the Australian Government and the NSW Government have endorsed the transition from fossil fuels to renewable energy, implementing supporting policies, plans and frameworks to support the transition. A cost-benefit analysis was therefore not required within the established framework, as economists employ cost-benefit analysis to ascertain whether the benefits to the community outweigh the costs, ensuring economic efficiency.

The project aligns with the initiatives and serves as a crucial component of the infrastructure needed to meet the Australian Government and NSW Government renewable energy transition vision. Given the overarching policy, direction and objectives, the Secretary's environmental assessment requirements (SEARs) for the project from the NSW Department of Planning, Housing and Infrastructure (DPHI) do not require the preparation of a cost-benefit analysis.

Cost was a consideration in the alternatives analysis and this is explained further in *section 5.19.2* of this Submissions Report.

Location of the preferred alignment at Millfield

Alternate options for the preferred alignment were investigated near Millfield, further to the west toward Cedar Creek Road. These options were considered primarily to avoid impacts on Millfield. However, the options to the west were limited by significant topography and access constraints. These limitations prevented the selection of an alignment to the west. The preferred alignment was the only technically feasible option in the topographically steep area between Pokolbin State Forest and Corrabare State Forest.

In selecting the preferred transmission line alignment, a key consideration was to minimise visual impacts. Where possible, the transmission towers would be set back from the main ridgelines rather than being placed on the top to reduce visual impacts from Millfield.

Avoidance of private land and maximising use of public land

The project's objectives included maximising the use of mining land, suitable public land and electricity easements and minimising significant land use conflicts and impacts on people and the environment.

The transmission line alignment has been selected to minimise impacts on private landowners while considering environmental, social, cost and technical factors, as discussed in *section 3.6.2* of the EIS. This selection was made in consultation with affected landowners. Where possible, alternative routes were developed to bypass private properties entirely. Where the alignment avoids private land, further measures have been taken to refine the visual impact for properties with a line of sight to potential tower locations.

A realignment of the initial project corridor that resulted in minimising impacts on private land was moving the southern switching station from adjacent to the existing Eraring substation site to the Olney State Forest. This avoided property acquisitions for 32 private landowners and removed the potential for visual impacts to sensitive receivers in Martinsville and Cooranbong.

Other refinements included utilising road verges and existing transmission infrastructure to co-locate the transmission line, thereby minimising impacts on private land. To reduce impacts on agricultural properties, alternative routes were developed to avoid traversing the centres of these lands, particularly along the Hunter River.

With regards to the Singleton Military Area (SMA), the preferred alignment through the SMA was determined by a Site Selection Board of the Department of Defence, as detailed in *section 3.6.2* of the EIS.

Avoidance of high conservation areas and other biodiversity values

Avoidance and minimisation of biodiversity impacts was a key consideration in the alternatives and options analysis. State government mapping publicly available online was used in the first instance to avoid and minimise the project's impacts on high conservation value areas such as national parks and flora reserves and existing biodiversity offset areas. Better-quality remnants of threatened ecological communities (TECs) that provide habitat for threatened species and important habitat for the Regent Honeyeater and Swift Parrot were also avoided to the extent possible.

Following the selection of the preferred alignment, an iterative design process based on field survey results was undertaken to further avoid and minimise the project's impacts on biodiversity, as outlined in *section 3.6* and further detailed in *Chapter 8 (Biodiversity)* of the EIS.

Further information regarding the approach taken to avoiding and minimising impacts to biodiversity through project development is provided in *section 5.1.2* of this Submissions Report and *Appendix E (Revised biodiversity development assessment report)* of the Amendment Report.

5.1.2 Suggestions to use cleared areas and avoid areas of biodiversity value

Submitter ID numbers

S-92118210, S-92686707, S-92697462, S-93336707, S-93943712, S-94270973, S-94410706, S-94818719, S-94983464, S-94993220, S-95044210, S-95064460, S-95065706, S-95114486

Summary of issues

Submitters suggested that the project should be located with existing cleared areas and that areas with high biodiversity value such as State forests should be prioritised for avoidance. Suggestions included:

- that the transmission line corridor is amended to use the existing cleared corridor to the north of the project near Neath to minimise vegetation clearance
- the need to prioritise avoidance of biodiversity impacts as per the requirements of the *Biodiversity Conservation Act 2016* and *Environmental Planning and Assessment Act 1979*
- investigation of alternatives to minimise the impact of the Olney Switching Station and the transmission line corridor on Littlejohn's Tree Frog.

Response

Use of existing transmission line infrastructure

Strategic alternatives in the form of network solutions (optimisation and modification of existing transmission line infrastructure) were explored and detailed in *section 3.1, Chapter 3 (Alternatives and options)* of the EIS. Network solutions involve upgrading existing transmission line infrastructure in the region. These upgrades would not fully unlock the supply of electricity from the Central-West Orana or New England Renewable Energy Zones (REZs). These upgrades would increase the transfer level by about 200 megawatts (MW) to one gigawatt (GW), but not the 3 to 4 GW required to meet the energy demands of the Hunter, Sydney and Illawarra. Furthermore, the existing 330 kV transmission infrastructure is an essential part of the existing electricity grid in NSW. Upgrading it would require many outages over a two-year period and there is currently no back-up transmission so this would risk energy security (a reliable supply of electricity) for consumers in NSW.

Optimisation and modification of the existing 330 kV transmission infrastructure in the region would also cause significant land use conflicts in the Pokolbin wine/tourist area and surrounding residential areas. It would result in extensive clearing of TECs in areas such as the Singleton Military Area, Werakata State Conservation Area (SCA) and Werakata National Park.

New transmission line infrastructure (in the form of a 500 kV double circuit transmission line) is therefore required for the HTP.

The transmission line alignment has been refined to utilise existing transmission line infrastructure where feasible reducing potential social and environmental impacts, as discussed in *section 3.6.2* of the EIS and shown in *Figure 4.2* in *Chapter 4 (Project description)* of the EIS. The preferred transmission line alignment co-locates with existing transmission line infrastructure in the vicinity of Hunter Valley Operations, the Bulga mining complex, and in the Singleton Military Area.

Approach to selecting the preferred route

The approach to selecting the preferred route for the project was described in *Chapter 3 (Alternatives and options)* of the EIS and in *section 5.1.1* of this Submissions Report.

As discussed above, corridor alternatives were identified based on EnergyCo's planning pillars and project objectives developed specifically for the HTP. The 'environment' planning pillar is defined as 'impacts to natural and cultural environments' and its corresponding planning principle (among others) is to 'minimise negative impacts on biodiversity values'. EnergyCo's project objectives were to 'minimise significant land use conflicts and impacts on people and environment' (refer to *section 3.3* of the EIS).

Three strategic corridors were selected (North, Central, South) with 19 route options identified and assessed, as outlined in *section 3.3* of the EIS. Route option South A was selected as the preferred route for the HTP.

The advantages and disadvantages of route option South A were outlined in *Table 3.5* of the EIS. It was concluded that there would be fewer impacts to people as it crosses less private land and is situated further away from residential dwellings and suburbs. It was also identified that there was greater capacity for colocation with existing transmission lines and the utilisation of large amounts of public land and potentially available mining land. EnergyCo acknowledged that a disadvantage of route option South A would be the introduction of new electricity transmission infrastructure

through vegetated areas of State forests that would result in impacts on biodiversity – although less than route options North A and Central A which would impact Hunter Valley TECs.

Three transmission alignment alternatives (Alignment A, B and C) within route option South A were then assessed using the project objectives and additional environmental considerations that included criteria to ‘minimise impacts on unique or sensitive biodiversity and cultural values and offset unavoidable biodiversity impacts’ (refer to *Table 3.6* of the EIS). Alignment A was identified as the preferred alignment for the HTP.

In response to early community feedback and further technical and environmental investigations, several refinements and improvements were made to the preferred alignment for the HTP. This included moving the southern switching station from Eraring Power Station to the site of an old commercial timber plantation in Olney State Forest. Moving the switching station made it possible to avoid the communities of Martinsville and Cooranbong, removing 32 private landowners from the HTP corridor. The revised corridor also avoided major recreation areas in the State forests and no longer traversed Jiliby State Conservation Area.

Avoidance of high conservation areas and other biodiversity values

High conservation value areas such as Watagans National Park, Werakata National Park, Warrawolong Flora Reserve and existing biodiversity offset areas associated with the Bulga mining complex were avoided, as discussed in *section 3.3* and *section 8.2* of the EIS. In addition, the better-quality remnants of TECs were avoided that provide habitat for threatened species and important habitat for the Regent Honeyeater and Swift Parrot.

Following the selection of a preferred alignment, an iterative design process based on field survey results was undertaken to further avoid and minimise the project’s impacts on biodiversity, in accordance with the requirements of the NSW *Biodiversity Conservation Act 2016* (BC Act), as outlined in *section 3.6* and *section 8.2* of the EIS.

With the refinement of the project design the following additional considerations were incorporated into the transmission line alignment and project assessment, as outlined in *Chapter 8 (Biodiversity)* with further detail provided in *Technical Report 1 – Biodiversity development assessment report* of the EIS:

- co-location – placing sections of the transmission line alongside existing infrastructure or in disturbed areas, such as mining sites, forestry operations or cleared lands, where native vegetation and habitat quality are low
- relocation – adjusting the alignment to avoid impacts on threatened species and communities and known populations of serious and irreversible impact species, including the Brush-tailed Rock Wallaby, microbats and threatened flora habitats
- partial clearing – implementing controlled vegetation clearing within and adjacent to the transmission line easement, focusing only on vegetation taller than 2 metres
- spanning and retention of forested gullies – reducing the extent of clearing within the State forests by spanning steep ravines and valleys where adequate conductor clearance can be achieved
- access – using existing access tracks where possible to minimise additional vegetation clearing and minimising construction of new access tracks

- micro-siting – mechanisms to adjust project features during detailed design to avoid areas with high biodiversity value when on the ground works commence, including the minor relocation of project elements such as transmission towers to avoid high biodiversity values.

Minimising impacts to Littlejohn's Tree Frog

Following public exhibition of the EIS and in response to consultation carried out with species experts and regulators, amendments and refinements to the project have been made to further minimise impacts to Littlejohn's Tree Frog within the Olney State Forest including adjustments to access tracks, transmission line tower locations and defining additional areas where no clearing of vegetation would be permitted. These changes are reflected in the disturbance areas and no-go zones mapped in *Appendix E (Revised biodiversity development assessment report)* of the Amendment Report. Options to refine the location of the Olney Switching Station within Olney State Forest were also considered, however these options were not determined to be feasible or effective in minimising impacts to Littlejohn's Tree Frog. *Section 9.1.3.5 of Appendix E (Revised biodiversity development assessment report)* of the Amendment Report provides further detail on the specific actions taken to avoid and minimise direct and indirect impacts on Littlejohn's Tree Frog.

The amended project's residual impacts on 70.34 hectares of habitat within 300 metres of breeding areas (waterways and constructed breeding ponds) is approximately 10 per cent of the total area of similar suitable habitat (703.26 hectares) within Olney State Forest. Importantly, the amended project has avoided 60 of 62 (or 96 per cent) of the recently constructed breeding ponds for this species.

5.1.3 Suggestions for underground transmission lines

Submitter ID numbers

S-94270973, S-94965494, S-95064460, S-95096715, S-95096724, S-95108231, S-95114486, S-95114715, S-95114723

Summary of issues

Submitters requested that further consideration is given to the undergrounding of the project to minimise impacts on biodiversity and to improve the resilience of the project to extreme weather and fire events.

Response

Options to underground the transmission infrastructure were considered in *section 3.2, Chapter 3 (Alternatives and options)* of the EIS.

EnergyCo acknowledged the benefits of undergrounding compared to overhead transmission infrastructure can typically include:

- reduced visual and noise impacts
- no impacts on aerial operations
- generally lower electric and magnetic fields
- lower risk of damage to the transmission lines due to external factors (e.g. extreme weather, falling trees, wildlife, bushfires, vehicles).

A comparison of overhead and underground transmission lines is provided in *Table 3.2* of the EIS. The key considerations assessed included constructability, environmental considerations, reliability, operations and maintenance, easement requirements, vegetation management, ground disturbance, effective circuit length, charging current, construction duration, and value for money.

An overhead transmission line solution is the preferred solution for the HTP for the reasons listed in *section 3.2* of the EIS. The reasons are that an overhead transmission line would be:

- more flexible to respond to the significant changes in terrain
- better suited to span multiple water crossings rather than the need to provide a submarine cable
- better suited to minimise the structures required within poor geological conditions, this would be limited to tower structures only rather than a continuous excavation of multiple trenches or tunnels
- easier and faster to repair than an underground option in the event of damage
- less intrusive than an underground option, with ground disturbance required at tower footings and where vegetation is required to be cleared in the transmission line easement
- more effective over hundreds of kilometres than an underground option
- significantly lower in cost, reducing overall costs for the community and consumers
- faster in construction timeframes, reducing the impacts associated with construction on the community and delivering this critical infrastructure as soon as possible to benefit consumers.

This is generally consistent with the findings of the parliamentary inquiry into the feasibility of undergrounding transmission infrastructure for renewable energy projects published in August 2023.

5.1.4 Suggestions for alternate alignments

Submitter ID numbers

S-92240456, S-94879975, S-94965494, S-94967706, S-94995477, S-95004721, S-95012245, S-95023957, S-95090232, S-95108231, S-95114715, S-95114723

Summary of issues

Submitters suggested that alternate alignments for the HTP corridor are considered to minimise impacts on the environment and community. Specific suggestions included alternative alignments that:

- minimise impacts to the environment, communities, waterways and farming land
- minimise impacts to the Millfield and Mount View community including rural residential zones and Millfield Public School
- reposition the HTP corridor about 600 metres to one kilometre west towards Wollombi to minimise impacts on Millfield and Congewai Creek Valley
- avoid private property at Mount Thorley by moving the alignment to mining land, following the railway line or in the industrial area
- provide an alternative alignment within the Singleton Military training area to minimise impacts on the surrounding community, heritage and biodiversity
- minimise impacts on the Hunter Valley Gliding Club.

Response

Approach to selecting the preferred route

Chapter 3 (Alternatives and options) of the EIS provided a detailed description of the alternatives considered for the HTP. The alternatives analysis followed a holistic, multi-criteria assessment that considered impacts to people and the environment, technical feasibility and cost. A summary of the alternatives assessment is provided in the response in *section 5.1.1* of this Submissions Report.

Once a preferred alignment for the project was identified it was refined in response to community feedback and further technical and environmental investigations (including biodiversity, heritage, landscape and visual, surface water, flooding and bushfire). Ahead of public exhibition of the EIS, EnergyCo published feedback reports including *Shaping the Hunter Transmission Project* in May 2024 and an updated report *Refining the Hunter Transmission Project* in December 2024 to outline the refinement process for the HTP. The refinements were also detailed in *section 3.6* of the EIS.

Location of the preferred alignment at Millfield

Alternate transmission line routes were investigated near Millfield, further to the west toward Cedar Creek Road. These options were considered primarily to avoid impacts on Millfield. However, the options to the west were limited by significant topography and access constraints. These limitations prevented the selection of an alignment to the west. The preferred alignment was the only technically feasible option in the topographically steep area between Pokolbin State Forest and Corrabare State Forest.

In selecting the preferred transmission line alignment, a key consideration was to minimise visual impacts. Where possible, the transmission towers would be set back from the main ridgelines rather than being placed on the top to reduce visual impacts from Millfield.

Landscape character and visual impacts of the project at Millfield are summarised in *Chapter 10 (Landscape and visual)* and are presented in detail in *Technical Report 3 – Landscape character and visual impact assessment* of the EIS. Further assessment of the Wollombi Road construction support site is provided in *Appendix G (Landscape character and visual impact assessment addendum)* of the Amendment Report. In addition, and in response to community requests, additional photomontages from three vantage points were produced for Millfield (refer to *section 5.7* of this Submissions Report).

Visual impacts from public and private viewpoints have been assessed as low to negligible from Millfield, as presented in the EIS. There are no design changes to the transmission line alignment in Millfield.

Mitigation measures to avoid or minimise potential landscape and visual impacts are listed in *Appendix D (Updated mitigation measures)* of the Amendment Report. These measures include (among others) limiting vegetation clearance to the minimum extent necessary for construction and operation to maximise existing visual screening and retention of the existing landscape character. In addition, lighting at construction support sites will be designed and operated in accordance with *AS 4282 2019 Control of the obtrusive effects of outdoor lighting* to avoid/minimise nighttime lighting impacts from construction support sites, including the Wollombi Road construction support site, to the west of Millfield.

Location of preferred alignment at Mount Thorley

The transmission line alignment between Bulga and Mount Thorley was designed to utilise mining-owned land wherever feasible, to avoid a designated conservation offset area associated with the Bulga mining complex, to avoid flooding risks associated with the Hunter River, and to address safety concerns related to major hazardous facilities in Mount Thorley Industrial Estate.

Further discussions with stakeholders has resulted in a realignment of the transmission line at Mount Thorley. Around four kilometres of the transmission line has been realigned, moving it further south and away from the Hunter River. This involves the transmission line continuing south adjacent to the Whittingham to Mount Thorley rail line before deviating in an eastward direction to join the transmission line north of the intersection of Putty Road/Broke Road. The proposed realignment of the transmission line at Mount Thorley reduces impacts on agricultural land and reduces flood risks on transmission towers previously located closer to the Hunter River.

The proposed realignment that forms part of the amended project is included in *Figure 3-1* of the Amendment Report.

Location of preferred alignment in vicinity of Warkworth Aerodrome

The location of the transmission line alignment was selected in consultation with an aviation expert to understand any potential impacts on the uncertified Warkworth Aerodrome (operated by the Hunter Valley Gliding Club). The Hunter Valley Gliding Club was consulted during the preparation of the EIS. A summary of potential aviation impacts was presented in *Chapter 21 (Hazards and risks)* of the EIS with further details provided in *Technical Report 16 – Aviation impact assessment*. It was concluded that potential adverse impacts to glider safety and activities would be minimal with the implementation of mitigation measures detailed in *Technical Report 16 – Aviation impact assessment*.

Alternative corridors were also considered in *section 3.3* of the EIS, with the preferred route and the associated reasoning detailed in *section 3.4* and *section 3.5* of the EIS. As it relates to the Warkworth Aerodrome, alternatives to the alignment to the north east are not feasible due to the following constraints:

- flooding risks from the Hunter River
- landholder impacts to Hunter Valley Operations
- landholder impacts to the Maison Dieu community
- leaseholder impacts to the stakeholders on Hunter Valley Operations land
- biodiversity impacts to threatened ecological communities
- Lemington Road's future realignment.

Altering the tower design in proximity to the Warkworth Aerodrome was also considered, however due to design constraints, this would not be feasible, as it would result in towers being brought closer together and increase other impacts in a heavily constrained area.

Refer to *section 6.12* and *section 8.16* of this Submissions Report for the response to the matters raised in the Hunter Valley Gliding Club submission and Civil Aviation Safety Authority (CASA) advice regarding impacts to the Warkworth Aerodrome.

Location of preferred alignment at Singleton Military Area

EnergyCo commenced discussions with the Department of Defence in March 2024 to determine the feasibility and possible locations of a transmission line alignment through the SMA.

Three potential transmission line alignments were identified by EnergyCo in consultation with the Department of Defence. EnergyCo undertook an evaluation of the options in line with considerations stipulated by the Department of Defence. These considerations included onsite considerations regarding the use of the military area (potential impacts on land use, infrastructure and services, and environment and heritage) and offsite considerations for community (noise and vibration, visual, traffic).

In December 2024, EnergyCo presented the options and evaluation to a Site Selection Board of the Department of Defence. The western alignment was selected as preferred by the Department of Defence in March 2025 as it would have the least disruption on the use of the SMA, as detailed in *section 3.6.2* of the EIS.

5.1.5 Strategic project alternatives

Submitter ID numbers

S-94036960, S-94193709, S-95077956, S-95096715, S-95096724, S-95114492, S-95118708

Summary of issues

Submitters expressed the view that a new double-circuit 500 kV transmission line was unnecessary and that the strategic need for the project could be achieved through the optimisation and modification of existing transmission line infrastructure.

Response

Chapter 3 (Alternatives and options) of the EIS provided a detailed description of the alternatives considered for the HTP. Strategic alternatives were identified and assessed against strategic objectives (i.e. the outcomes the project must achieve to address the project need) and included doing nothing, non-network solutions, and network solutions, as detailed in *section 3.1*.

Network solutions considered (optimisation and modification of existing transmission line infrastructure) involved upgrading existing transmission line infrastructure. When assessed against the strategic objectives for the project it was concluded that upgrading existing transmission line infrastructure would not match the supply of electricity from the Central-West Orana or New England REZs. The upgrades would increase the transfer level by about 200 megawatts (MW) to one gigawatt (GW), but not the 3 to 4 GW required to meet the future energy demands of the Hunter, Sydney and Illawarra (AEMO 2022 and Transgrid 2023).

Network solutions (new transmission line infrastructure) met all the strategic objectives, specifically providing the required capacity to match the supply of electricity from Central West Orana and New England REZs, and was selected as the preferred strategic alternative for the HTP.

5.2 Project description – construction

5.2.1 Construction access routes

Submitter ID

S-92240456, S-94320457, S-94410706, S-94697206, S-94770457, S-94965458, S-94995477, S-95012245, S-95016475, S-95096061, S-95105488, S-95108971.

Summary of issues

Submitters commented on the construction access routes proposed for the project, with particular focus on how construction access routes were selected and described in the EIS, the suitability of these access routes and the need for road improvements. Specifically, submitters:

- queried what assessment had been undertaken to identify what road upgrades were required for construction access routes and access tracks to accommodate use by the project
- requested more detail on the definition (access road or access track), proposed use and scope of any upgrades, widening or passing bays proposed for Pokolbin Mountains Road and Broken Back Road
- expressed concern regarding the proposed use of Pokolbin Mountains Road, Broken Back Road, Oakley Lane, Mount Baker Road, Wollombi Road and Mount View Road as they are perceived to be unsuitable for construction access routes without further upgrades or mitigation measures
- suggested that EnergyCo should contribute to improvements along Pokolbin Mountains Road, noting residents have previously paid road contribution fees to improve the road
- suggested that Mitchells Road off Mount View Road should be considered as a construction access route instead of Mount Baker Road as it is wider, flatter and requires less clearing
- suggested use of Sawpit Road for access instead of Pokolbin Mountains Road.

Response

EnergyCo understands there may be some confusion around the definition of the terms access routes and access tracks. Consistent with how the terms were used in the EIS, construction access routes comprise existing State, regional or local roads that would be used by construction traffic, whereas access tracks provide the connection from the public road network to the construction impact area. Access tracks are located on public land (such as State forests) or private freehold land.

Based on the concept design and early construction planning, potential access routes proposed to be used during construction of the HTP were identified in the EIS. Access tracks have been chosen in consultation with landowners (see *Chapter 6 (Engagement)* of the EIS). Individual land use needs have been considered to enable the landowner's continued land use, as well as to minimise the overall environmental impacts. The requirements to retain or reinstate access tracks at the end of construction would be determined with continued consultation with landowners during property access negotiations and ahead of the commencement of operation.

The construction access routes have been refined and presented in the revised project description in *Appendix A* of the Amendment Report and *Appendix H (Revised traffic and transport impact assessment)* of the Amendment Report. The construction access routes would be used regularly to enable construction activities, including:

- travel between construction support sites (some with temporary worker accommodation), laydown areas, and stringing sites
- movement of earthworks materials between sections of the construction impact area, as required
- transport of water to temporary worker accommodation, construction support sites and ancillary sites.

In addition to these routes, oversize and/or over mass (OSOM) construction routes have been clarified in *Appendix A* of the Amendment Report and *Appendix H (Revised traffic and transport impact assessment)* of the Amendment Report. These routes would be used for OSOM movements between ports to the construction impact area for the delivery of project infrastructure and specialist transmission equipment. These routes were selected with consideration of existing gazetted OSOM approved routes.

The determination of project construction routes was carried out in consultation with relevant stakeholders including Transport for NSW and local councils.

An existing conditions assessment was undertaken as part of the traffic impact assessment which involved undertaking both site inspections, and desktop and mapping analysis to identify, describe and qualitatively assess the existing conditions of proposed construction traffic routes (refer to *section 3* of *Appendix H (Revised traffic and transport impact assessment)* of the Amendment Report for further details).

EnergyCo notes there are concerns about some of the proposed access routes. *Section 5.2.9* and *section 5.3* of *Appendix H (Revised traffic and transport impact assessment)* of the Amendment Report assesses the suitability of the proposed access roads and tracks and identifies what upgrades would be required to accommodate construction vehicles and machinery. Where there are no existing access tracks that provide appropriate access to the new transmission line corridor and construction areas, and where existing conditions (such as terrain) prevent access along the transmission line corridor, new access tracks would be constructed. These new tracks would be within existing disturbed areas, wherever possible. The upgrades required to existing access tracks would vary depending on the condition of individual tracks. They would generally need to be up to 6 metres wide and able to accommodate a 19-metre semi-trailer (or similar vehicle).

All proposed upgrades are described in *section 5.3.12* of *Appendix H (Revised traffic and transport impact assessment)* of the Amendment Report. Proposed upgrades for the roads queried in submissions to ensure they are suitable for construction traffic are as follows:

- Pokolbin Mountains Road – several passing bays for one lane movement for 19 metre articulated vehicle (AV) and sections of road widening, potential upgrade of cattle grids or culvert crossings.
- Broken Back Road – passing bays for one lane movement for 19-metre AV at various sections between Pokolbin Mountains Road and Broken Back Road and sections of road widening
- Oakley Lane – Intersection upgrades or safety treatments at the Cessnock Road/Oakley Lane intersection

- Mount Baker Road – passing bays are proposed where residential properties are located. Additional traffic control will be needed at the intersection with Mount View Road due to sharp turns and limited width
- Wollombi Road – pavement upgrades and widening for two construction vehicle movements at access points
- Mount View Road – passing bays and traffic control proposed due to narrow geometry and sharp intersection with Mount Baker Road.

EnergyCo recognises that some residents would like the condition of Pokolbin Mountains Road to be improved. EnergyCo notes that Pokolbin Mountains Road is a local road and any road contribution fees paid by residents are paid to Cessnock City Council. Once construction of the HTP is complete, Cessnock City Council will be responsible for ongoing maintenance of Pokolbin Mountains Road. Notwithstanding, the proposed road and access track upgrades identified as part of the HTP would result in overall improvements to the roads/tracks.

EnergyCo notes the suggestion to use Mitchells Road as an alternative to Mount Baker Road. Mount Baker Road is an existing public road which connects through to existing tracks that will provide closer access to the locations where proposed HTP towers will be built and where conductors will be strung.

The suggested Mitchells Road access option was assessed and determined not to be feasible due to terrain constraints, vegetation clearing requirements and safety considerations. Using Mitchells Road would require building new sections of track (or public road) through private property and it is the EnergyCo's preference to use existing roads and tracks wherever possible. Furthermore, using Mitchells Road to reach the proposed tower locations would involve tracks through even more challenging topography than Mount Baker Road. EnergyCo will continue to consult with residents during detailed design to confirm safe and practical construction access arrangements.

EnergyCo also notes the suggestion to use Sawpit Road as an alternative to Cedar Creek Road. Using Sawpit Road would require more significant upgrades, additional impacts to private properties and upgrades to bridges over Baldy Creek and Congewai Creek.

5.3 Statutory context

5.3.1 Adequacy of the EIS

Submitter ID

S-94900217, S-94956774, S-94965556, S-94965781, S-94995477, S-95105488, S-95108971

Summary of issues

Submitters raised concerns about the adequacy of the EIS, specifically the:

- perceived lack of rigour, robustness, transparency and detail in certain EIS assessments
- perceived inadequate assessment or mitigation of impacts to a specific residential property
- lack of assessment of potential impacts on the Millfield Rise housing development

- inconsistencies in relation to description and assessment of the use, upgrades and passing bays along Pokolbin Mountains Road between *Technical Report 4 – Traffic and transport impact assessment*, *Technical Report 9 – Soils and land impact assessment*, *Technical Report 10 – Surface water impact assessment*, *Technical Report 8 – Noise and vibration impact assessment*, *Technical Report 12 – Flood impact assessment* and *Technical Report 19 – Air quality and greenhouse gas impact assessment*.

Response

Adequacy of the EIS

The EIS has been prepared to meet the requirements of the NSW *Environmental Planning and Assessment Act 1979* (EP&A Act) and the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The EIS has been prepared to address the SEARs issued on 13 August 2024 (SSI-70610456) and the assessment requirements issued by the Australian Government on 14 March 2025 (EPBC 2024/09874). The preparation of the EIS has been guided by DPHI's *State Significant Infrastructure Guidelines – Preparing an Environmental Impact Statement* (2022) and the *Transmission Guideline – Guidance for State significant transmission infrastructure* (2024), and addresses the requirements of Division 5, Part 8 of the *Environmental Planning and Assessment Regulation 2021* (EP&A Regulation).

Technical studies have been prepared by suitably qualified technical specialists and in accordance with the applicable technical requirements and guidelines and informed by consultation with relevant government agencies and other stakeholders.

The EIS has also been reviewed and contains the appropriate declaration of a Registered Environmental Assessment Practitioner (REAP). The role of a REAP is to ensure that EISs for State significant projects are prepared to a high standard and include all the necessary information for DPHI to assess the project. REAPs are required to make a declaration that an EIS submitted with a State significant project meets certain standards in relation to compliance, completeness, accuracy and legibility. This declaration is set out in the EP&A Regulation.

Assessment or mitigation of impacts to a specific residential property

The environmental impact assessment presented in the EIS uses a 'project impact area' to define the likely areas to be affected by the construction and operation of the HTP. The project impact area includes private properties that have been assessed (as relevant) in the EIS. The project impact area is described in *Chapter 7 (Approach to assessment)* in the EIS.

Property management plans will be developed for directly impacted properties in consultation with the landowner. The property management plans will outline the protocols that will be implemented to address landowner concerns during construction of the project (refer to *Appendix D (Updated mitigation measures)* of the Amendment Report).

Millfield Rise

EnergyCo has consulted with planners at Cessnock City Council regarding the proposed 'Millfield Rise' subdivision (DA 8/2016/731/3 and DA 8/2022/567/1). Cessnock City Council was unable to confirm construction timeframes for the subdivision and noted that a condition has been imposed for the upgrade of Mount View Road. As per mitigation measure CI1, EnergyCo will employ an adaptive management approach which will include continuous engagement and coordination with proponents / key stakeholders of relevant future projects with the aim of confirming construction programs such that potential cumulative impacts can be identified, avoided and mitigated as appropriate (refer to *Appendix D (Updated mitigation measures)* of the Amendment Report).

Pokolbin Mountains Road

EnergyCo note there were inconsistencies in the data with regards to Pokolbin Mountains Road in the EIS and technical reports included as part of the EIS. The proposed upgrades as identified in *Technical Report 4 – Traffic and transport impact assessment* were not identified and assessed along the full length of the road in *Technical Report 10 – Surface water impact assessment*, *Technical Report 8 – Noise and vibration impact assessment* and *Technical Report 19 – Air quality and greenhouse gas impact assessment*. These assessments have been updated to correct the inconsistencies as part of the Amendment Report. The updated assessments for noise, surface water and air quality are presented in the Amendment Report, specifically in *Appendix K (Noise and vibration impact assessment addendum)* and *sections 5.11 (Surface water)* and *5.17 (Air quality)* of the Amendment Report.

The other reports mentioned by submitters did identify and assess the proposed upgrades to Pokolbin Mountains Road consistently with *Technical Report 4 – Traffic and transport impact assessment*, specifically:

- *Technical Report 9 – Soils and land impact assessment – section 4.9* assesses soil and land impacts on the entire length of the Pokolbin Mountains Road identified as an access road (including passing bays)
- *Technical Report 12 – Flood impact assessment – Table 5.3* includes an initial assessment of potential flood affectation of local roads and intersections that are to be upgraded and includes Pokolbin Mountains Road.

As described in *section A.3.5, Appendix A (Revised project description)* and *section 5.3.12, Appendix H (Revised traffic and transport impact assessment)* of the Amendment Report, proposed upgrades for on Pokolbin Mountains Road would include several passing bays for one lane movement for 19 metre articulated vehicle (AV) and sections of road widening, potential upgrade of cattle grids or culvert crossings.

5.4 Community and stakeholder engagement

5.4.1 Consultation on the project – general

Submitter ID

S-94193709, S-94697206, S-94770457, S-94900217, S-94949957, S-95064460, S-95108231, S-95118460

Summary of issues

Submitters raised a range of concerns about the consultation process undertaken for the project, including:

- the conduct and transparency of engagement activities, with some community members perceiving aspects of the process as intimidating, unfair, or lacking openness
- the intent and depth of consultation, with feedback suggesting that certain activities were viewed as meeting only the minimum statutory requirements, rather than demonstrating a genuine commitment to listen and respond to community input
- the accuracy and consistency of information shared, including claims that statements made by project representatives during engagement activities were unclear, inconsistent, or perceived as misleading
- perceived lack of engagement or adequate responses to concerns raised.

Response

Chapter 6 (Engagement) of the EIS provides an overview of the comprehensive consultation and engagement program undertaken for the HTP. Engagement commenced in late 2022 and has continued through corridor selection, environmental assessment, public exhibition and post-exhibition refinement. This engagement program was designed to go beyond statutory notification requirements, supporting meaningful participation, issue identification, issue resolution and design refinement over time, particularly for stakeholders most directly affected by the project.

The engagement program was structured around three key phases:

- Phase 1 – Early engagement (late 2022 to May 2024). This phase focused on building awareness, supporting route selection and corridor refinement, and identifying early issues and opportunities
- Phase 2 – EIS and post-exhibition engagement (May 2024 to February 2026). This phase supported and informed preparation of the EIS, identified local and technical issues, and refined mitigation approaches. It included targeted engagement on high-impact issues, supported the statutory public exhibition of the EIS, and extended beyond exhibition through a structured and intensive post-exhibition engagement program undertaken to respond to submissions and inform preparation of the Submissions Report and Amendment Report
- Post-exhibition engagement was deliberately designed to ensure that consultation did not cease when submissions closed, but instead intensified during the period when project refinements, technical investigations and mitigation measures were being developed for assessment. This engagement included targeted briefings, one-on-one meetings, site inspections, technical discussions and written follow-up with landowners, councils, government agencies, Registered

Aboriginal Parties, environmental organisations and other stakeholders. These activities were undertaken to clarify issues raised in submissions and to test and refine proposed project amendments and mitigation measures prior to finalisation

- Phase 3 – Project delivery (from 2026 onward): This future phase will support detailed design, construction and operations and will maintain ongoing, issue-driven engagement with communities and stakeholders, subject to Conditions of Approval (if granted) and the network operator’s community engagement and communication plan.

Engagement across these phases has included community information sessions, pop-ups and market stalls, one-on-one landowner meetings, specialist workshops, targeted briefings, webinars, written correspondence and formal submissions. Engagement was delivered proportionately, with increased intensity and depth for stakeholders and locations experiencing higher potential impacts, particularly within approximately five kilometres of the corridor and in areas subject to amended project elements.

Across project development, EnergyCo has undertaken more than 4000 conversations and interactions with over 1100 people and organisations, including more than 300 community events and pop-ups and over 400 stakeholder meetings and briefings. During and following the EIS exhibition alone, more than 500 individual post-exhibition engagement records were captured and formally closed through EnergyCo’s Consultation Manager system, demonstrating a sustained focus on two-way engagement during the refinement phase.

EnergyCo acknowledges concerns raised by some submitters that aspects of the consultation process were experienced as unclear, intimidating or insufficiently responsive, particularly in relation to property acquisition and local impacts. EnergyCo recognises the importance of genuine, early and ongoing engagement and acknowledges that, for some stakeholders, expectations were not met. These concerns were taken seriously and directly informed the design and delivery of the post-exhibition engagement program, which focused on issue clarification, transparency and resolution rather than notification alone.

Engagement efforts were tailored by proximity zones, with particularly intensive engagement within five kilometres of the corridor, and targeted to local councils (Cessnock City Council, Lake Macquarie City Council, Muswellbrook Shire Council, Singleton Council and Central Coast Council), NSW and Commonwealth government agencies, environmental and community organisations, Registered Aboriginal Parties, directly affected landowners, local businesses and recreational users. Additional support mechanisms were available for elderly or vulnerable landowners through EnergyCo’s landholder support framework.

EnergyCo’s engagement framework aligns with the NSW Government Transmission Infrastructure Engagement Principles (NSW Government, 2023) and is guided by EnergyCo’s Landholder Engagement Protocols and Code of Conduct. All public-facing information and engagement materials are subject to governance and assurance processes to support factual accuracy and consistency, with issues and feedback captured, tracked and closed through Consultation Manager for statutory reporting and auditability.

Consultation and feedback informed both development and refinement of the preferred corridor, preparation of the EIS, and subsequent refinements documented in the Submissions Report and Amendment Report. Key outcomes demonstrably influenced by community, landowner, council, Aboriginal and stakeholder input include:

- reduction in directly affected private properties from 78 to approximately 20 at EIS stage
- relocation of the proposed switching station to Olney State Forest, removing more than 30 private properties from the HTP South corridor
- corridor adjustments in HTP North and Central to avoid sensitive properties, cultural heritage sites and areas of high biodiversity value
- refined tower siting near Millfield, Greta and Ravensworth to minimise visual impacts.
- access route refinements reducing heavy vehicle use on local roads (e.g. Mount View Road and Pokolbin Mountains Road)
- enhanced biodiversity and Aboriginal cultural heritage protections
- strengthened traffic, property-access and safety management measures.

Following the close of the EIS exhibition, EnergyCo undertook structured post-exhibition engagement with affected landowners, councils, agencies and stakeholders to clarify issues, validate assumptions underpinning refinements and explain how feedback was being addressed through amended project elements, strengthened mitigation measures or ongoing management commitments. This approach ensured continuity and traceability between issues raised during exhibition and submissions, post-exhibition engagement activities, and the outcomes documented in the Submissions Report and Amendment Report.

Engagement will continue through determination, detailed design and construction (2026 to 2029). The network operator will maintain ongoing opportunities for face-to-face engagement, community events and online updates, supported by formal engagement governance requirements under Conditions of Approval (if granted). EnergyCo remains committed to respectful, transparent and evidence-based engagement and to clearly demonstrating how community and stakeholder feedback informs project decisions throughout delivery. Refer to *Chapter 4 (Engagement)* of this Submissions Report for further details.

5.4.2 Consultation during project development

Submitter ID numbers

S-92686707, S-92697462, S-93336707, S-93580456, S-93943712, S-94198717, S-94410706, S-94818719, S-94965781, S-94995477, S-95105488

Summary of issues

Submitters raised concerns about the consultation undertaken during the development of the HTP. Key themes included perceptions of limited or ineffective engagement and a lack of transparency during early project planning. Specifically, submitters referred to:

- a perceived lack of meaningful engagement and consideration of community input during identification and refinement of the transmission line corridor and route selection process
- concerns about transparency and access to information during corridor selection, including EnergyCo's handling of community requests for supporting documentation

- a perceived lack of engagement with affected landowners and communities to identify opportunities to avoid, minimise, or mitigate project impacts during development
- the Dyer Review findings and the importance of early, genuine, and ongoing community engagement in major infrastructure planning
- insufficient responses to community suggestions regarding alternative access points, such as those raised by residents of Mount Baker Road.

Response

EnergyCo acknowledges the feedback received regarding consultation and engagement during the development of the HTP. Engagement undertaken between 2022 and 2025 was designed to inform the identification, assessment and refinement of transmission corridor options prior to the selection of a preferred corridor. This engagement commenced before any preferred corridor was identified and continued iteratively as technical, environmental and land-use constraints were progressively understood. Feedback gathered through this process directly informed corridor feasibility, refinement and avoidance outcomes, including the location and refinement of the preferred corridor (refer to *section 5.4.1* of this Submissions Report). Further detail is provided in *section 3.6, Chapter 3 (Alternatives and options)* of the EIS and *Chapter 3 (Description of amendments and refinements)* of the Amendment Report.

EnergyCo recognises that early-stage infrastructure planning can be challenging for communities, particularly where corridor options are still evolving. Some stakeholders perceived engagement during this phase as limited or insufficiently transparent. EnergyCo acknowledges these perceptions and recognises the importance of meaningful, transparent and ongoing engagement throughout all stages of planning and delivery. Early engagement commenced in early 2022 to inform identification of potential transmission corridor options across the Hunter region. Activities included stakeholder briefings, public information sessions, community feedback mechanisms, interactive mapping tools and one-on-one meetings with landowners, councils, agencies and community representatives. These discussions focused on identifying community values, environmental and cultural sensitivities, land-use constraints, access considerations and technical risks prior to corridor shortlisting.

Through mid- to late-2023, further engagement was undertaken to refine shortlisted corridor options. Communities along potential alignments were consulted through local events, correspondence, interactive mapping tools and feedback channels. Engagement during this phase focused on identifying where impacts could be avoided or minimised and where further investigation or refinement was required. This input informed selection of the preferred corridor announced in December 2023 and guided targeted landowner engagement in 2024 to support preparation of the EIS.

Community, landowner and stakeholder input collected across these stages directly shaped corridor refinement and project development (refer to *section 5.4.1* of this Submissions Report). Outcomes from this engagement are documented in *Shaping the Hunter Transmission Project (2023)* and *Refining the Hunter Transmission Project (2024)*, which outline how community feedback influenced corridor selection, alignment adjustments and avoidance outcomes.

EnergyCo acknowledges that some submitters consider that decisions were made prior to meaningful community input. While not all suggestions could be adopted due to environmental, technical, safety or engineering constraints, all feedback received was recorded, reviewed and considered alongside these factors as part of the options assessment and refinement process. Where suggestions could not be implemented, EnergyCo sought to explain the relevant constraints and trade-offs.

Engagement has been guided by the principles of early, genuine and ongoing participation, consistent with the recommendations of the Dyer Review (Community Engagement Review 2023 to 2024). EnergyCo recognises the importance of addressing concerns regarding transparency, consistency and trust through clear communication, timely information sharing and explanation of how feedback has influenced decisions.

In line with these principles, EnergyCo has progressively shared information as studies were completed and verified, explained how community feedback informed outcomes, maintained open enquiry and complaints channels, and adapted engagement approaches as the project moved from early planning into detailed assessment.

As the HTP progresses into detailed design and delivery, EnergyCo will continue to:

- provide regular project updates in plain language across multiple channels
- hold on-ground information sessions and local events
- maintain one-on-one engagement with directly affected landowners
- publish summaries of feedback themes and EnergyCo responses
- manage enquiries, concerns and complaints through documented processes.

Construction access and information availability

Submitters raised concerns regarding transparency and access to information relating to construction access routes during corridor selection. EnergyCo acknowledges these concerns and notes that information relating to access options, constraints and methodologies was released progressively as investigations were completed and verified. During corridor selection and refinement, studies relating to access options, environmental constraints and construction feasibility were ongoing. As investigations reached appropriate levels of certainty, information was shared through community updates, briefings and direct engagement, with further detail subsequently provided through the EIS and its technical appendices. The EIS provides a consolidated and publicly accessible source of information on construction access considerations.

Following public exhibition of the EIS, EnergyCo undertook targeted post-exhibition engagement to respond to submissions and requests for further information, including clarification discussions with residents, councils and government agencies. These activities informed the assessment outcomes documented in this Submissions Report and the Amendment Report. In response to feedback from residents near Mount Baker Road, the suggested Mitchells Road access option was assessed and determined not to be feasible due to terrain constraints, vegetation clearing requirements and safety considerations. EnergyCo will continue to consult with residents during detailed design to confirm safe and practical construction access arrangements.

EnergyCo acknowledges ongoing landowner concerns regarding the proposed use of Pokolbin Mountains Road and associated road upgrades. Engagement on construction access arrangements will continue during detailed design, including targeted consultation with affected residents and

coordination with relevant road authorities, with feedback considered alongside technical, environmental and safety requirements. Ongoing consultation with the community, landowners, government agencies and key stakeholders will continue throughout detailed design and construction, focusing on site-specific impacts, access arrangements, mitigation measures and construction interfaces (refer to *Chapter 4 (Engagement)* of this Submissions Report). Updated project information will continue to be made available through EnergyCo's website, community updates and briefings.

5.4.3 Consultation during preparation of the EIS

Submitter ID numbers

S-92240456, S-94697206, S-94770457, S-94954711, S-94965458, S-94995477, S-95012245, S-95047724, S-95096061, S-95104707

Summary of issues

Submitters raised concerns about the consultation undertaken during the preparation of the EIS.

Overall, feedback indicated that while EnergyCo undertook multiple engagement activities during project development, some community members and stakeholders felt that the process did not always demonstrate how local input was reflected in the EIS.

Key themes included:

- alignment between engagement and documentation. Several submitters suggested that community feedback gathered during engagement was not clearly visible in the EIS. Submitters noted that local issues raised around access, amenity, and property impacts – particularly in rural areas such as Pokolbin, Millfield and Broke – were not always traceable in the relevant technical chapters
- clarity and timing of project information. Some submitters felt that details about proposed access routes and potential out-of-hours activities, such as along Oakley Lane and Mount View Road, were not shared early enough to allow meaningful review or discussion before exhibition
- engagement with sensitive receivers. Concerns were raised that direct consultation with schools and other sensitive locations identified in the social impact assessment was limited before exhibition, particularly in relation to local traffic and safety issues
- engagement with specialist interest groups. A small number of submitters highlighted limited consultation with technical and operational stakeholders such as aviation users, requesting further engagement to confirm potential impacts and mitigation measures
- transparency and coordination. Several respondents perceived inconsistencies between the engagement process and the EIS content, noting that the relationship between community input, technical assessment and final reporting could have been more clearly explained.

Collectively, submitters called for greater transparency, clearer communication of project information, and stronger evidence of how community feedback is considered in technical assessments and project refinement.

Response

EnergyCo acknowledges and values the feedback received regarding consultation undertaken during the preparation of the EIS. EnergyCo recognises that effective consultation includes not only undertaking engagement activities, but also clearly demonstrating how local knowledge and feedback influence assessment scope, technical assumptions, mitigation development and project refinement within statutory documentation. The project team appreciates the time and contribution by residents, landowners, councils and organisations remains committed to improving how these contributions are captured and reported.

EnergyCo notes that the EIS is a corridor-scale assessment document, prepared in accordance with statutory requirements, and that some community members expected to see more property-level or site-specific detail directly reflected in the EIS chapters. While the EIS focuses on assessing strategic and corridor-wide impacts, property-specific engagement and design refinement have occurred in parallel and have informed design assumptions, mitigation frameworks and the identification of amended project elements assessed in subsequent documentation.

EnergyCo acknowledges that some stakeholders found it difficult to see how their feedback was reflected in the EIS, particularly regarding construction access, safety measures or potential working hours could have been communicated more clearly prior to exhibition. This feedback has been carefully considered and has directly informed changes to how engagement outcomes are documented and linked to assessment outputs in post-exhibition reporting.

The Amendment Report adopts a more granular and issue-localised approach than the EIS, explicitly linking post-exhibition engagement themes to amended project elements, refined assessment scope and strengthened mitigation measures. This includes clearer documentation of how property-level, location-specific and issue-driven feedback received during and after exhibition informed the technical investigations and refinements assessed in the Amendment Report.

Additional work is also underway to strengthen traceability across documentation by:

- explicitly linking engagement themes to the relevant technical chapters and appendices
- localising issues geographically and thematically where amendments were assessed
- clarifying where feedback informed mitigation or assessment methodology rather than design change
- distinguishing between matters addressed through amended project elements and those managed through Conditions of Approval and ongoing engagement.

These improvements are reflected in the Submissions Report and Amendment Report, which together provide a clearer line of sight between what was heard during engagement, how issues were considered, and how outcomes are addressed.

EnergyCo will continue to engage directly with landowners and local communities in areas, particularly where issues such as traffic, amenity and construction access were raised, to refine mitigation measures and communication protocols. Ongoing engagement will also continue with local schools, childcare centres and other sensitive receivers to manage road safety, access and timing of works collaboratively, and with specialist and operational stakeholders, including aviation users, to confirm technical findings and ensure appropriate mitigation.

5.4.4 Consultation during public exhibition of the EIS

Submitter ID numbers

S-92686707, S-94410706, S-94668223, S-94770457, S-94946207, S-94949957, S-94958737, S-94965494, S-94965556, S-94965781, S-94995477, S-94996527, S-95012245, S-95077956, S-92240456

Summary of issues

Submitters raised concerns about consultation during the public exhibition of the EIS. Key themes included:

- timing, duration and accessibility of the EIS exhibition period. Submitters felt the 28-day exhibition period was too short given the length of the EIS and supporting technical reports, queried why earlier timeframes changed, and sought clarity on how elderly and vulnerable residents were supported to participate
- difficulties submitting objections. Several submitters reported challenges with the online submission form and queried whether objections would be properly captured as the form did not allow selection of both 'providing comments' and 'objection' to the project
- unanswered questions and perceptions of a pre-determined outcome. Some submitters felt that questions raised during community information sessions were not addressed in full and expressed concern that preliminary activities such as surveys, investigations and property discussions indicated the project had already been decided
- perceived inconsistencies in project mapping. Submitters identified differences between the EIS figures and the online interactive map, including the location of access tracks and an existing 330 kV transmission line.

Overall, submitters called for clearer information, improved accessibility to materials, better mapping clarity and a more consistent understanding of how community input is considered in the planning process.

Response

EnergyCo acknowledges the feedback received regarding consultation during the public exhibition of the EIS. The exhibition process – including its timing, duration and the administration of the online submission system – is managed by the NSW DPHI in accordance with statutory requirements. The EIS exhibition period for the project was for 28 days from 28 August to 24 September 2025, consistent with these provisions. Earlier indicative timeframes were revised as technical assessments required additional time to complete. Elderly and vulnerable residents were supported during exhibition, including access to hard-copy materials, face-to-face sessions, phone support and follow-up engagement.

EnergyCo appreciates the effort taken by stakeholders to review the material and prepare submissions. All submissions lodged through the NSW Planning Portal form part of the statutory assessment. Each submission, whether labelled as an objection or a comment, is reviewed in full, and the issues raised are addressed collectively through the Submissions Report and, where relevant, the Amendment Report. These documents are made publicly available via the NSW Planning Portal to support transparency. EnergyCo acknowledges that some questions raised

during information sessions were not fully addressed at the time. This was due to certain technical studies and design elements still being in progress during the exhibition period. Where detailed information was not yet available, EnergyCo provided the most accurate advice possible and committed to sharing further information once studies were completed. This approach ensured that information presented during exhibition was evidence-based and avoided pre-empting assessment outcomes.

Since exhibition, EnergyCo has continued to clarify outstanding queries through follow-up conversations with landowners, written responses, and updates published as part of the EIS and supporting technical documentation. Importantly, the Amendment Report reflects a more granular and issue-localised treatment of matters raised during exhibition, explicitly linking post-exhibition engagement and submissions to amended project elements, refined assessment scope and strengthened mitigation measures. This provides clearer visibility of how community input has informed assessment outcomes compared with the broader, corridor-scale focus of the EIS.

EnergyCo reviewed the mapping discrepancies identified by submitters. The location of the existing 330 kV transmission line shown in the EIS and on the interactive map is accurate and based on the authoritative NSW Spatial Services dataset, which has been verified against EnergyCo's internal datasets and reviewed by specialist spatial advisers. A separate 66 kV Ausgrid line is present in the area referenced and may have contributed to confusion. Differences in the depiction of access tracks reflect evolving design detail; these have been reviewed and any required clarification or updates are addressed through the Amendment Report to improve consistency and transparency. EnergyCo acknowledges that the EIS is a strategic assessment document prepared at a corridor scale, and that some stakeholders expected greater property-level detail during exhibition. Property-specific engagement and issue resolution has continued outside the EIS chapters and has informed design assumptions, mitigation frameworks and the amended elements assessed in the Amendment Report and subsequent project stages.

EnergyCo remains committed to providing accurate, consistent and accessible information throughout the planning and assessment process. Through the Submissions Report, Amendment Report and ongoing engagement, EnergyCo aims to clearly demonstrate how questions raised during exhibition have been considered, responded to and, where relevant, translated into assessment outcomes and project refinements as the project moves toward detailed design.

5.4.5 Future community and stakeholder engagement

Submitter ID numbers

S-92240456, S-94770457, S-94956774, S-94976464, S-95028957, S-95047460, S-95095706, S-95105488

Summary of issues

Submitters raised a range of suggestions and requests for how future community and stakeholder engagement should occur as the HTP progresses. Key themes included:

- suggestions for consultation with directly affected landowners, residents and businesses — including the Pokolbin Mountains Road Residents, Landholders and Users group — during the preparation of post-approval management plans

- requests for timely information about project commencement and updates on construction staging, sequencing and timing
- requests for further consultation with CASA and the Hunter Valley Gliding Club to manage aviation safety risks
- suggestions that local stakeholder groups be consulted if any material changes to the alignment, tower siting or construction staging are proposed
- calls for continued meaningful and transparent engagement with the Millfield community
- requests for clarity about where the DPHI's determination and Conditions of Approval can be accessed
- suggestions that DPHI representatives attend future discussions to provide independent oversight.

Response

Where refinements meaningfully change potential impacts, EnergyCo will provide targeted updates and opportunities for affected communities to seek clarification, consistent with the engagement approach set out in *Chapter 6 (Engagement)* of the EIS and the engagement framework described in the Amendment Report. Future engagement will increasingly focus on site-specific and property-level matters as the project progresses from corridor-scale assessment into detailed design and delivery.

Additional mitigation measures have been adopted in response to concerns raised by residents along Pokolbin Mountains Road. These include a Property Access Subplan for properties on Pokolbin Mountains Road and parts of Mount View Road and Mount Baker Road to manage heavy construction vehicle access during construction (mitigation measure TT14), as well as measures to manage dust impacts near vineyards (mitigation measure AQ5). Further detail is provided in *Appendix D (Updated Mitigation Measures)* of the Amendment Report.

Aviation-related matters raised in submissions, including requests for further consultation with the Hunter Valley Gliding Club, Gliding Australia and CASA, are being reviewed as part of this Submissions Report to ensure all relevant issues are properly considered and addressed through the appropriate technical assessments (refer to *sections 6.11, 6.8 and 8.16* of this Submissions Report, respectively). EnergyCo has continued consultation with the Hunter Valley Gliding Club and Gliding Australia after the exhibition of the EIS. Further detail on aviation-related engagement and how issues have been addressed is provided in *Chapter 6 (Response to organisation submissions)* and *Chapter 8 (Response to government submissions)* of this Submissions Report and the relevant sections of the Amendment Report.

EnergyCo acknowledges the importance of respectful, transparent and ongoing communication with directly affected landowners and local communities. Engagement will continue in accordance with statutory requirements, the approach outlined in *Chapter 6 (Engagement)* of the EIS, and the engagement commitments described in the Amendment Report, as the project progresses through determination, detailed design and construction.

The Environmental Assessment Report and the Minister's determination will be published on the Planning Portal website following determination, including Conditions of Approval, should the project be approved.

EnergyCo acknowledges the suggestions for an independent presence in future discussions, including requests for DPHI representatives to attend. EnergyCo is open to involving relevant government agencies where appropriate and will continue to work with DPHI to ensure engagement processes remain transparent, well-governed and aligned with statutory expectations.

5.5 Biodiversity

5.5.1 Impact assessment approach

Submitter ID numbers

S-93336707, S-93943712, S-94818719, S-94900217, S-94983464, S-94996527, S-95064460

Summary of issues

Submitters commented on the approach to the biodiversity impact assessment. These comments were concerned with the adequacy of the survey or the impact assessment. Specific comments or concerns included:

- gaps in biodiversity survey data and the perception that unsurveyed areas were treated as having no ecological value
- perceived inadequate quantification of biodiversity impacts, including the number of hollow bearing trees to be directly impacted
- the ecological impact of road upgrades and widening had not been adequately addressed
- the assessment appears to be focused on listed threatened species, leading to an inadequate assessment of impacts to non-threatened species, species interactions and ecosystem function
- perceived inadequate assessment of population viability and site-specific habitat connectivity as well as consideration of risks from climate change and increased pest and weed spread
- the use of the term Common Wombat instead of Bare-nosed Wombat and the consideration of the risk of vehicle strikes on wombats
- that the assessment of the Grey-headed Flying-foxes and its nearby camp was inadequate
- the impact assessment approach carried out for certain species including threatened frog species (Littlejohn's Tree Frog (*Rawlinsonia [Litoria] littlejohni*), Southern Stuttering Frog (*Mixophyes australis*) and Giant Burrowing Frog (*Heleioporus australiacus australiacus*)), Greater Gliders, Koalas, *Genoplesium insigne* and hilltopping insects.

Response

A biodiversity development assessment report was prepared to support the EIS for the project and was included as *Technical Report 1 – Biodiversity development assessment report* and summarised in *Chapter 8 (Biodiversity)* of the EIS. *Technical Report 1 – Biodiversity development assessment report* for the project has applied the NSW Biodiversity Assessment Method 2020 (BAM) (DPIE 2020) to assess the project's impact on biodiversity in accordance with the NSW *Biodiversity Conservation Act 2016* (BC Act). This assessment has been revised since the exhibition of the EIS to include the results of additional surveys and in response to submissions (*Appendix E (Revised biodiversity development assessment report)*) of the Amendment Report.

Between 2022 to 2025, seasonal surveys were undertaken during summer, autumn, winter and spring in accordance with relevant BAM flora and fauna survey guidelines. As described in section 8.1.4 of the EIS, around 84 per cent of the disturbance area was accessible and native vegetation extent was verified in the field. For the remaining 16 per cent where access was limited (due to restricted access, seasonal constraints, or topographic limitations) or not granted by property owners, native vegetation extent was determined using aerial photograph interpretation, with reference to the NSW State Vegetation Type Map (SVTM), and supported by ground-truthed areas with similar vegetation, landscape setting, geology and soil types. In these instances, the assessment adopted conservative assumptions such as the assumed presence of threatened species when assessing potential impacts and determining what offsets would be required. For areas where no access was possible (representing around six per cent of the disturbance area), the Remote assessment of biodiversity values: BAM guide (Remote Assessment Guide) (DCCEEW, 2025) was applied to support the assumed presence or exclusion of candidate threatened species with approval of NSW Department of Climate Change, Energy, the Environment and Water (NSW DCCEEW) – Conservation Programs, Heritage and Regulation (CPHR).

Section 8.5 of *Technical Report 1 – Biodiversity development assessment report* describes the adaptive management strategy that would be adopted to manage any residual uncertainties in the biodiversity assessment. This would include carrying out pre-clearing surveys for species that have been subject to assumed presence to enable appropriate avoidance and minimisation measures to be implemented (i.e. micro-siting and delineation of ‘no go zones’).

Since public exhibition of the EIS, further surveys have been carried out to supplement the data in *Technical Report 1 – Biodiversity development assessment report* and assess impacts associated with the amended project. The methodology for the additional field surveys has been informed by further consultation with NSW DCCEEW – CPHR and where applicable species experts. The survey coverage of the amended disturbance area is around 91 per cent, excluding areas where no access was available and areas where no impact will occur. *Appendix E (Revised biodiversity development assessment report)* of the Amendment Report provides further details on the additional surveys carried out for the assessment of the amended project.

Quantification of biodiversity impacts and consideration of hollow bearing trees is provided throughout *Technical Report 1 – Biodiversity development assessment report* and *Appendix E (Revised biodiversity development assessment report)* of the Amendment Report. As described in section 2.2.6 of these reports, given the inability to visually inspect every scattered tree in the field given the constraints, a conservative approach was adopted to assign hollows to each tree that was unable to be surveyed in the field.

Road upgrades and widening were assessed in the EIS. These areas are classified as Disturbance Area A as outlined in *Table 8.1 of Technical Report 1 – Biodiversity development assessment report* and *Appendix E (Revised biodiversity development assessment report)* of the Amendment Report. Disturbance Area A accounts for the potential full removal of vegetation as well as ongoing maintenance during operation.

While the BAM focuses on threatened species and ecological communities, *Technical Report 1 – Biodiversity development assessment report* and *Appendix E (Revised biodiversity development assessment report)* of the Amendment Report assessed impacts on non-threatened species, species interactions and ecosystem functions through assessing impacts on plant community types

(including those that do not align with a threatened ecological community), non-native vegetation that may provide habitat for fauna species, habitat connectivity and other impacts such as vehicle strike risk. As such, the BAM assesses impacts to both threatened species and the protected native species through assessing the ecosystems that they form part of, which may require biodiversity offsets under the BAM.

Population viability, habitat connectivity and consideration of the risks from climate change and pest and weed spread (which are defined as key threatening processes under the BC Act) has been assessed where relevant for threatened ecological communities or species at risk of a serious and irreversible impact (refer to *Appendix E (Revised biodiversity development assessment report)* of the Amendment Report.

The use of common names such as Common Wombat or the Bare-nosed Wombat is not critical to the assessment process and either term can be used. This is a widely distributed species occurring throughout eastern and south eastern Australia. Vehicle strikes is an important issue that will be managed during the construction phase as this is when a higher risk of vehicle strikes will occur. The risk of vehicle strikes would be lower during operation of the project due to the substantially reduced number of vehicle movements that would be required for the project.

It is acknowledged that a Grey-headed Flying-fox camp is located at Millfield and is located over five kilometres from the proposed new transmission lines. The project is not likely to result in any substantial impacts to this species, certainly not through impacts to the camp or breeding habitats. The loss of foraging impact will be offset for this species via ecosystem biodiversity offsets. In addition, the foraging habitats will remain over thousands of hectares locally and regionally and the relatively small area of impact is not likely to affect the Grey-headed Flying Fox.

Technical Report 1 – Biodiversity development assessment report has been updated since the public exhibition of the EIS to provide further assessment on the likely impacts to threatened species such as Littlejohn's Tree Frog, Southern Stuttering Frog and Giant Burrowing Frog, Greater Gliders, Koalas and *Genoplesium insigne* (*Appendix E (Revised biodiversity development assessment report)* of the Amendment Report). A range of experts within the project team or independently engaged for the project have provided detailed assessment and proposed management and mitigation measures for each species where relevant. Since EIS exhibition, there has been particular focus on the further avoidance of impacts to the listed frog species (particularly Littlejohn's Tree Frog) in response to submissions received. This has resulted in proposed amendments to the project, including the location of towers and related infrastructure. The reduced impacts on frog species associated with these amendments are assessed in *Appendix E (Revised biodiversity development assessment report)* of the Amendment Report. *Sections 5.1.2 and 5.5.4* of this Submissions Report provide further discussion on the proposed amendments and revised assessment of impacts on frogs expected from the project.

5.5.2 General biodiversity impacts

Submitter ID numbers

S-92118210, S-92686707, S-92697462, S-92766206, S-93336707, S-93943712, S-94193709, S94410706, S-94697206, S-94818719, S-94879975, S-94956774, S-94965456, S-94965494, S94965556, S-94983464, S-94993220, S-94995477, S-95004721, S-95064460, S-95065706, S95077956, S-95090232, S-95096004, S-95096715, S-95096724, S-95097206, S-95106969, S95108231, S-95109962, S-95114492, S-95114715, S-95116720, S-95118708, S-95119961

Summary of issues

Submitters expressed concerns about the biodiversity impacts of the project. Specific concerns included:

- the magnitude of impacts on native vegetation, including clearing of native vegetation and endangered and critically endangered ecological communities
- the magnitude and significance of impacts on threatened species, including direct impacts to 38 threatened flora species and 28 threatened fauna species and potential serious and irreversible impacts (SAIL)
- potential biodiversity impacts from increased biosecurity risks, noise and vibration (including blasting), litter and fragmentation
- impacts on ecosystems, fauna habitats and sensitive waterways.

Response

As described in *section 8.2, Chapter 8 (Biodiversity)* of the EIS, during the selection of the HTP corridor, EnergyCo sought to avoid and minimise the project's impacts on biodiversity. Importantly, high conservation value areas such as Watagans National Park, Werakata National Park, Warrawolong Flora Reserve and existing biodiversity offset areas were avoided. Additionally, the better-quality remnants of TECs that provide habitat for threatened species and important habitat for the Regent Honeyeater and Swift Parrot were also avoided.

Following the corridor selection, an iterative design process based on field survey results was undertaken to further avoid and minimise the project's impacts on biodiversity (refer to *section 5.1.2* of the Submissions Report for further details). Cumulatively, the implemented measures to avoid and minimise impacts on biodiversity have resulted in a reduction in clearing of native vegetation by greater than 200 hectares. Significantly, this includes a reduction of over 100 hectares of impact to threatened ecological communities and a habitat for a range of potential SAIL entity species.

Importantly, partial clearing of the transmission line easement is designed to minimise impacts on biodiversity values, including indirect impacts. The retention of vegetation up to a height of two metres within disturbance area B will create a natural transition between the fully cleared areas (disturbance area A, including the centreline) and the surrounding forest or woodland, avoiding an abrupt, hard edge. Significant efforts have also been made to establish 'no clearing zones' to support habitat connectivity by avoiding impacts on gullies within State forests and nature reserves by stringing the lines at substantial distances and avoiding any clearing where possible. Permanent disturbance areas would be located outside of core riparian zones and the many smaller gullies and creeks located in mountainous areas would be spanned by the project. Since public exhibition of the

EIS and in response to submission, design changes have resulted in further avoidance and minimisation of areas of high biodiversity value, particularly areas of TEC and habitat for threatened frog species, particularly Littlejohn's Tree Frog (*Litoria littlejohni*) (refer to *Chapter 3 (Actions taken since exhibition)* of this Submissions Report). These changes have been reflected in *Appendix E (Revised biodiversity development assessment report)* of the Amendment Report and are described in *Chapter 3 (Description of amendments and refinements)* of the Amendment Report. Despite these changes, in some cases the magnitude of biodiversity impacts appears larger than as exhibited in the EIS due to the amendments, further survey data and biodiversity assessment methodology adjustments that were made in consultation with NSW DCCEEW – CPHR. As such, EnergyCo acknowledges that despite the substantial efforts to avoid and minimise biodiversity impacts, residual impacts would remain. As outlined in *Appendix E (Revised biodiversity development assessment report)* of the Amendment Report, the amended project would result in impacts to around 945 hectares of native vegetation including 228 hectares listed under the BC Act (seven TECs) and 167 hectares listed under the EPBC Act (three TECs). Around 44 per cent of this native vegetation is in a disturbed condition, including derived grasslands and thinned, poor or plantation woodlands associated with previous clearing, mine rehabilitation and hardwood forestry plantations. This includes:

- 4.31 hectares of Hunter Floodplain Red Gum Woodland in the NSW North Coast and Sydney Basin Bioregions, which is a TEC that is listed as a potential SAI entity
- 38 threatened flora species (13 recorded and 25 conservatively assumed present). These include 24 species listed under the BC Act and EPBC Act, 12 species listed under the BC Act only and two species listed under the EPBC Act only. Four potential flora SAI entities were recorded during surveys and three were conservatively assumed present
- 28 threatened candidate fauna species listed under the BC Act would be potentially impacted by the project (26 recorded and two assumed present). Fifteen of these species are also listed under the EPBC Act and eight are potential SAI entities (all of which were recorded during field surveys).

The reduced viability of adjacent habitat due to noise, dust or light spill was assessed as negligible. Similarly, impacts associated with transport of weeds, pests and pathogens were assessed as negligible. Note construction methodologies such as blasting are not proposed for HTP.

Specific mitigation and management measures have been proposed for residual biodiversity impacts, including impacts on SAI entities. These include measures that would be undertaken during the construction and operation of the project. These include, but are not limited to, micro-siting of the transmission line infrastructure and associated work sites to avoid and minimise impacts during detailed design where possible, pre-clearing surveys, retention and enhancement of habitat features, no clearing zones and sensitive biodiversity areas. Residual impacts to biodiversity values will be managed through the implementation of a biodiversity management plan (BMP) for the project.

5.5.3 Impacts on frogs

Submitter ID numbers

S-94270973, S-94718957, S-95044210, S-95064460, S-95096004, S-95109456, S-95112715

Summary of issues

Submitters expressed concerns regarding the potential impacts on specific frog species by the project, with a key focus on the impacts of the Olney switching station on Littlejohn's Tree Frog (*Litoria littlejohni*) breeding areas. Other frog species identified in submissions included the Southern Stuttering Frog (*Mixophyes australis*), Giant Burrowing Frog (*Heleioporus australiacus australiacus*) and Green and Golden Bell Frog (*Litoria aurea*). Two of the submissions were highly detailed and raised several specific issues including concerns that:

- the Olney switching station and transmission line would cut through the Watagans population range of Littlejohn's Tree Frog, impacting breeding sites and constructed ponds that were created for conservation by University of Newcastle, NSW National Parks and Wildlife Service (NPWS) and Forestry, which may increase isolation of populations reducing genetic diversity and population viability
- the project would impact on the specific habitat that the frogs rely upon. This includes impacts arising from the sedimentation of waterways, disruption of hydrology within waterways that are critical for breeding sites and fragmentation of habitat
- the project would threaten the extinction of one of only three remaining populations of Littlejohn's Tree Frog by directly impacting the extent of its distribution in the Olney State Forest
- the frog species that would be impacted are already vulnerable due to chytrid disease, low genetic diversity and past events such as bushfires, which means that further disturbance could lead to rapid decline and possible extinction.

Response

Technical Report 1 – Biodiversity development assessment report acknowledged that the project would result in potential direct and indirect impacts on threatened amphibian species recorded or assumed present within the disturbance area including:

- 3.81 hectares of habitat for Giant Barred Frog
- 26.75 hectares of habitat for Giant Burrowing Frog
- 63.53 hectares of habitat for Littlejohn's Tree Frog
- 43.54 hectares of habitat for Red-crowned Toadlet
- 180.09 hectares of habitat for Stuttering Frog (listed as an SAI entity).

Section B4.1.1 of the *Technical Report 1 – Biodiversity development assessment report* provided a significance assessment for Littlejohn's Tree Frog in accordance with the *Matters of National Environmental Significance – Significant Impact Guidelines 1.1* (Department of the Environment Water Heritage and the Arts, 2013). The assessment concluded that it is likely that the loss of 63.53 hectares of habitat would reduce the available resources for the species and potentially lead to a long-term decrease in the size of the local population and reduce the area of occupancy for the

species. Therefore, the project was assessed as likely to result in a significant residual impact on Littlejohn's Tree Frog.

Following public exhibition of the EIS and in response to consultation carried out with species experts and regulators, amendments and refinements to the project have been made to further minimise impacts to threatened species, particularly by avoiding important breeding habitats for frog species within the Olney State Forest (refer to *Chapter 3 (Description of amendments and refinements)* of the Amendment Report). This includes changes to locations of some access tracks, removal of a stringing site and other adjustments to the disturbance area within Olney State Forest compared to the exhibited disturbance area assessed in *Technical Report 1 – Biodiversity development assessment report* in the EIS. These changes are reflected in the disturbance areas and no-go zones mapped in *Appendix E (Revised Biodiversity development assessment report)* of the Amendment Report and are described in *Chapter 3 (Description of amendments and refinements)* of the Amendment Report.

Appendix E (Revised Biodiversity development assessment report) of the Amendment Report contains expanded and detailed information on the likely impacts to threatened species such as Littlejohn's Tree Frog, Southern Stuttering Frog and Giant Burrowing Frog. Each species has been assessed in detail by a range of experts within the project team or independently engaged for the project. Each species has impact assessment undertaken and management/mitigation measures proposed.

The amended project is expected to result in impacts to:

- 10.76 hectares of habitat for Giant Barred Frog
- 73.62 hectares of habitat for Giant Burrowing Frog
- 70.34 hectares of habitat for Littlejohn's Tree Frog
- 64.35 hectares of habitat for Red-crowned Toadlet
- 191.99 hectares of habitat for Stuttering Frog (listed as an SAI entity).

Residual impacts to frog species will be minimised through mitigation and management measures and the implementation of a BMP for the project. The BMP will be prepared by suitably qualified and experienced biodiversity experts, in consultation with relevant government agencies, including NSW DCCEEW – CPHR, NPWS, Forestry Corporation of NSW (FCNSW) and the Australian Government DCCEEW. Specific mitigation and management measures have been proposed for frogs including (refer to *Appendix D (Updated mitigation measures)* of the Amendment Report):

- mitigation measure B2 that requires further avoidance of threatened species, threatened ecological communities and SAI entities
- mitigation measure B4 that requires micro-siting of temporary construction infrastructure to minimise vegetation clearing and disturbance of watercourses
- mitigation measure B12 that requires a riparian vegetation management plan to be developed and implemented for the project to minimise impacts to riparian and aquatic environments
- mitigation measure B19 that requires an amphibian management plan to be prepared and implemented focusing on threatened amphibian breeding habitats within or near the disturbance area.

The project will also result in substantial investment into offsets outcomes via the Strategic Offset Delivery Agreement (SODA), which would contribute towards achieving conservation outcomes for these species (refer to *section 5.5.5* of this Submissions Report).

5.5.4 Management and mitigation

Submitter ID numbers

S-94697206, S-94900217, S-94983464, S-94996527

Summary of issues

Submitters commented on the management and mitigation measures proposed to address the biodiversity impacts of the project. Specific comments included:

- request for more detailed mitigation measures to protect threatened flora and fauna
- queried the effectiveness or feasibility of the mitigation measures proposed, including the feasibility of avoiding key habitat through detailed design of roads/access routes and the perceived ineffectiveness of road signs, speed limits and driver training to protect fauna from vehicle strike.

Submitters also identified additional mitigation measures, including:

- limits on clearing during breeding/flowering times for key species
- biosecurity measures to avoid the spread of weeds, pathogens and feral animals
- additional pre-construction surveys for key species of concern
- provision for replacement fauna nesting
- measures for indirect impacts arising from construction noise and traffic including speed control and signage
- procedures and policies to manage the response to vehicle strikes from the project, including consideration of coordination with Hunter Wildlife Rescue
- procedures and policies to reduce the risk of impact to burrows and bolt holes of the bare-nosed wombat and other ground dwelling wildlife during construction.

Response

As detailed in *section 8.7.1, Chapter 8 (Biodiversity)* of the EIS, a BMP would be prepared in consultation with relevant government agencies including NSW DCCEE – CPHR, NPWS, FCNSW and the Australian Government DCCEE. This will be the central guidance document during construction of the project (mitigation measure B1) and will contain more detailed measures and procedures to minimise and manage impacts on biodiversity.

The specific mitigation measures suggested by the community are generally covered by the BMP and mitigation measures proposed in *Appendix D (Updated mitigation measures)* of the Amendment Report, including:

- mitigation measure B3 requires consideration of measures to limit or amend construction activities during the breeding season for the Large-eared Pied Bat, Eastern Cave Bat (November to February), Large Bent-winged Bat, Little Bent-winged Bat (December to February) and Sooty Owl (June to August) that are proposed to occur within 100 metres of potential habitat for those species if these species are determined to be present by an ecologist
- the implementation of a biosecurity management plan (mitigation measure AG3) and a Myrtle Rust procedure (mitigation measure B20)
- pre-clearing surveys (mitigation measure B9)

- implementation of a supplementary hollow and nest strategy to provide alternative roosting and/or nesting habitat for threatened fauna displaced during clearing (mitigation measure B6)
- indirect impacts from noise and traffic would be minimised through the noise and vibration management plan as well as controls to minimise the risk of impacts to biodiversity from vehicle strike (mitigation measure B22)
- a fauna handling and rescue procedure and a requirement for a two-phase clearing process to allow fauna to move into adjoining habitat during vegetation clearing as part of the biodiversity management plan (mitigation measure B1)
- training of relevant project personnel, including relevant sub-contractors, on biodiversity management protocols and requirements for the project (mitigation measure B10)
- a threatened species unexpected finds protocol (mitigation measure B15).

Table 8.23 in *Appendix E (Revised biodiversity development assessment report)* of the Amendment Report provides an assessment of the likely efficacy (including risk of failure) of the proposed mitigation and management measures based on whether the measures have been proven to work in similar contexts. While every attempt will be made to avoid and minimise impacts through mitigation measures B2 and B4, including micro-siting of access tracks, it is acknowledged that the efficacy would be moderate and the risk of failure is high without management and feasibility being proven. To resolve the uncertainty, an adaptive management strategy would be implemented as described in section 8.5 of *Appendix E (Revised biodiversity development assessment report)* of the Amendment Report that allows for adjustments to the measures based on monitoring results, with the goal of achieving specific outcomes for biodiversity.

5.5.5 Biodiversity offsets

Submitter ID numbers

S-92611207, S-93336707, S-93943712, S-94193709, S-94818719, S-94983464, S-95077956

Summary of issues

Submitters commented on the biodiversity offsets for the project, including:

- concern with the offset delivery arrangement for the project, specifically that this is deferred to a separate agreement with NSW DCCEE with a lack of detail in the EIS on the SODA with questions on what offsets will be provided, how offsets will be secured and how the offsets will maintain regional conservation values
- concern that offset credits may be used to justify native vegetation clearing and that this approach is not effective at achieving positive biodiversity outcomes
- concern regarding lack of exhibition of the conservation investment strategy and strategy offset delivery agreement documents for the project alongside the EIS
- a suggestion that offsets resulting in work in degraded areas of parks and forests could partially improve the overall biodiversity outcome
- concern that the calculation of biodiversity offset credits only considers threatened species and aims to achieve no net loss rather than a nature positive outcome.

Response

As described in *section 5.5.2* of this Submissions Report, avoidance and minimisation of biodiversity impacts has been prioritised during project development and will continue to be a focus of detailed design and further construction planning as required by mitigation measures B2 and B4 as outlined in *Appendix D (Updated mitigation measures)* of the Amendment Report.

EnergyCo will enter into a SODA with the Secretary of the NSW DCCEEW for the project. Under this agreement, responsibility for delivering biodiversity offsets will be transferred to NSW DCCEEW with commensurate funding. Once finalised, the SODA will be published on the NSW DCCEEW Register of strategic offset delivery agreements.

Biodiversity offsets secured under the SODA will constitute either the retirement of like-for-like credits or conservation actions that are targeted at impacted entities. NSW DCCEEW will engage with credit owners, landowners and other potential partners in offset delivery through a range of programs including Credit Supply Fund auction processes, sponsored biodiversity stewardship agreements under the Stewardship Support Program, acquisition of new public land to create credits and tailored Saving our Species projects.

Since preparation of the EIS, the Hunter Conservation Investigation Strategy has been prepared and published by NSW DCCEEW. This strategy will underpin the implementation of the SODA for the project and guide the priority areas and actions for investment, that are identified for the Hunter region. The Hunter Conservation Investment Strategy has been developed to:

- integrate conservation programs and priorities to optimise delivery of regional conservation outcomes
- protect regionally significant conservation values
- improve ecological connectivity and resilience to climate change
- restore degraded ecosystems and habitats
- contribute to a comprehensive, adequate and representative protected area system
- deliver social benefits for the region.

The Hunter Conservation Investment Strategy considers opportunities to enhance biodiversity outcomes by rebuilding connectivity and resilience and consolidating protected areas, including consideration of land within and surrounding national parks and State forests.

All biodiversity offset outcomes will be in accordance with the BAM and State and Commonwealth legislation. The calculated biodiversity offsets are conservative and impacts are likely to be substantially less than calculated. The implementation of the SODA by NSW DCCEEW will ensure that the biodiversity offsets and measures taken will compensate for the unavoidable residual impacts to the required level which will result in positive regional conservation outcomes for affected species and ecosystems.

5.6 Aboriginal heritage

5.6.1 Impact assessment approach

Submitter ID numbers

S-94995477, S-95108231

Summary of issues

Submitters expressed concerns about the Aboriginal heritage assessment for the project, particularly in relation to the coverage of the Aboriginal heritage survey and a perceived lack of consultation to inform the Aboriginal heritage assessment.

Response

An Aboriginal cultural heritage assessment was prepared to support the EIS for the project and was included as *Technical Report 2 – Aboriginal cultural heritage assessment* and summarised in *Chapter 9 (Aboriginal Heritage)* of the EIS. The Aboriginal cultural heritage assessment for the project was carried out in accordance with NSW DPHI's Secretary's environmental assessment requirements for the project, as well as the requirements of relevant legislation, policies and guidelines (refer to *section 3.1 of Technical Report 2 – Aboriginal cultural heritage assessment* to the EIS). As part of *Technical Report 2 – Aboriginal cultural heritage assessment*, field survey consisted of a 38-week program, including pedestrian survey and test excavations undertaken by archaeologists alongside representatives of the registered Aboriginal parties (RAPs). The field program for *Technical Report 2 – Aboriginal cultural heritage assessment* was undertaken between March 2024 and March 2025, with test excavations occurring between September and October 2024. Ultimately, the field program resulted in around 190 days of on-Country activities for the Aboriginal individuals and organisations involved in the project (equivalent to over 600 person days). The field survey for the *Technical Report 2 – Aboriginal cultural heritage assessment* covered around 643 kilometres of linear pedestrian transects across the project impact area and included 7702 individual points of observation and documentation. Around 72 per cent of the project impact area was surveyed as part of *Technical Report 2 – Aboriginal cultural heritage assessment* (prior to public exhibition), and 104 test pits were excavated across the project impact area.

Following commitments in *Technical Report 2 – Aboriginal cultural heritage assessment* and in response to discussions with Heritage NSW during the preparation of the EIS and comments received during EIS exhibition, additional on-site activities were undertaken during the development of *Technical Report 2 – Aboriginal cultural heritage assessment* addendum as part of the Amendment Report (refer to *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report). These included the following:

- additional field surveys of previously uninspected areas of the project impact area. These were undertaken to fill any gaps in the field survey coverage undertaken for *Technical Report 2 – Aboriginal cultural heritage assessment* as a result of proposed amendments and/or improved land access. Around 160 kilometres of additional field survey was undertaken as part of *Technical Report 2 – Aboriginal cultural heritage assessment* addendum, which identified a further 13 Aboriginal objects, sites and places (as well as re-investigated seven previously documented

sites). These were dominated by isolated and low-density stone artefacts, but included a potential culturally modified tree. In combination with *Technical Report 2 – Aboriginal cultural heritage assessment* investigations, 82.5 per cent of the amended project impact area has been inspected. Of the remaining amended project impact area, seven per cent has not been surveyed due to either being rugged terrain considered dangerous (three per cent) and/or being existing sealed roads (four per cent). The remaining field survey would occur during detailed design either in advance and/or as part of the development of the Aboriginal cultural heritage management plan

- additional test excavation to further understand any buried cultural deposits within the project impact area. These investigations focused on locations within areas of predicted Warkworth Sands system in the vicinity of the Hunter River/Wollombi Brook confluence. Of the 40 locations within the project impact area proposed for test excavation in *Technical Report 2 – Aboriginal cultural heritage assessment*, 17 have now been completed (including a total of 284 test pits).

Discussions are ongoing with Heritage NSW in relation to the completion of field surveys. In addition, the remaining test excavations will be completed in accordance with mitigation measure AH05 of *Appendix D (Updated mitigation measures)* of the Amendment Report. Test excavations will adopt approaches and methods outlined as outlined in *Appendix D (Updated mitigation measures)* of the Amendment Report.

Regarding the consultation undertaken with Aboriginal people and organisations to inform the assessment of impacts to Aboriginal heritage, consultation activities completed as part of *Technical Report 2 – Aboriginal cultural heritage assessment* were undertaken in accordance with Heritage NSW guidelines. The project also undertook additional project-specific communication strategies to promote transparent and frequent two-way dialogue. Activities included early briefings and exploration of co-design opportunities, Aboriginal focus group meetings (face-to-face) throughout the assessment process, a cultural values mapping study with Elders and key knowledge-holders, and on-site field investigations. Since November 2023 and throughout the development of the project and progression of *Technical Report 2 – Aboriginal cultural heritage assessment*, EnergyCo liaised with 48 RAP organisations and/or individuals. The RAPs include locally based Wonnarua, Awabakal and Darkinjung individuals and/or organisations based primarily in Singleton, Cessnock and Newcastle, as well as the broader Aboriginal community with an interest in cultural heritage management. Discussions with the RAPs have been extensive and wide-ranging over the 22-month assessment process for *Technical Report 2 – Aboriginal cultural heritage assessment*. Feedback on the project and Aboriginal cultural heritage assessment (ACHA) activities has generally focused on who speaks for Country, the potential impact to Dreaming places and stories within the region, targeted discussion around key sites including rockshelters, art sites and grinding grooves identified as part of the field investigation, and mitigation measures. Prior to exhibition of the EIS, the draft *Technical Report 2 – Aboriginal cultural heritage assessment* was provided to RAPs for review and comment between 12 February 2025 and 19 March 2025, and again between 4 July 2025 and 1 August 2025 for review of proposed mitigation measures following refinements prior to finalisation of the report.

A summary of consultation activities with Aboriginal individuals and organisations as part of the development of *Technical Report 2 – Aboriginal cultural heritage assessment* is included in section 9.1.4, Chapter 9 (Aboriginal heritage) of the EIS and Chapter 4 (Aboriginal consultation) of *Technical Report 2 – Aboriginal cultural heritage assessment*.

Since the finalisation of *Technical Report 2 – Aboriginal cultural heritage assessment* and the exhibition of the EIS, consultation has remained ongoing with around 100 further interactions having occurred between July and December 2025. The draft *Appendix F (Aboriginal cultural heritage assessment addendum)* was provided to RAPs for review and comment between 21 November 2025 and 19 December 2025. When incorporating the interactions undertaken as part of *Technical Report 2 – Aboriginal cultural heritage assessment*, this amounts to over 1500 interactions with Aboriginal individuals and/or organisations on the project since November 2023, and around 655 person days of on-site participation.

A summary of additional consultation activities with Aboriginal individuals and organisations is included in *Chapter 4 (Aboriginal consultation)* of *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report.

5.6.2 General Aboriginal heritage impacts

Submitter ID numbers

S-92686707, S-94995477

Summary of issues

Submitters raised concerns regarding the potential impacts on Aboriginal heritage by the project, specifically submitters expressed:

- any loss of culturally significant sites is unacceptable
- concern about impacts to connections to Country as a result of impacts to land within the Watagan State Forest.

Response

With regard to loss of culturally significant sites, places and values, avoidance and minimisation of impacts to Aboriginal sites and places has been prioritised throughout design development of the project. Since initial discussions with Traditional Owners in late 2023, refinements to the project have been ongoing to avoid and/or minimise harm to cultural materials and landscapes wherever feasible. During the preparation of *Technical Report 2 – Aboriginal cultural heritage assessment*, six major workshops were undertaken involving the project's design team and Aboriginal heritage specialists to explore modifications and/or movement of project elements to reduce potential direct impacts. Specific refinement and avoidance measures that were implemented are outlined in *section 12.2 of Technical Report 2 – Aboriginal cultural heritage assessment*. It is also noted that *Technical Report 2 – Aboriginal cultural heritage assessment* committed to avoiding five highly significant sites within the cultural assemblage for the project.

Sites committed for avoidance has increased from five in *Technical Report 2 – Aboriginal cultural heritage assessment* to 20 in *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report. These sites are dominated by significant rockshelters and include the majority of documented stone arrangements and grinding grooves within or near the amended project impact area.

Mitigation measures are proposed to guide post-approval requirements for Aboriginal heritage. These include:

- ongoing consideration for the avoidance and minimisation of impacts as the project design continues to be refined prior to construction (mitigation measure AH03)
- development of an Aboriginal cultural heritage management plan (ACHMP) to provide a framework for implementation of the proposed project (mitigation measure AH04)
- development of a cultural values mitigation strategy in discussion with Elders and knowledge-holders to offset adverse impacts to cultural places and values (mitigation measure AH07)
- development of an interpretation strategy and plan to provide acknowledgement and other visual/educational opportunities for the Aboriginal and broader local community (mitigation measure AH11).

With regard to impacts to connections to Country as a result of the project, a cultural values mapping study was carried out for the project to identify cultural and intangible values associated with the project impact area, which included Watagan State Forest (refer to *Chapter 7 (Cultural values mapping) of Technical Report 2 – Aboriginal cultural heritage assessment* in the EIS). This included early co-design workshops with key Aboriginal individuals and organisations, which identified a number of potential cultural values and resulted in project refinement to avoid impacts to these values. Detailed cultural mapping was then undertaken by an anthropologist, Elders and key knowledge-holders for the project impact area. This study built on previous studies and ultimately identified 32 places of archaeological, traditional, historical and/or contemporary value to the Aboriginal community. These reiterated the importance of major promontories and several water sources in the region, as well as focusing on a number of archaeological sites either known and/or identified through the field program. Key view-lines to and from major promontories were also discussed and further explored to determine the values associated with them and how the project would affect them.

Mitigation measures and activities that may offset perceived harm to cultural places and values identified as part of the cultural values mapping study were explored and are outlined in *Appendix D (Updated mitigation measures)* of the Amendment Report. This includes the development of a cultural values mitigation strategy to be developed in consultation with key knowledge-holders, which would involve the implementation of Aboriginal-led cultural inductions, support for cultural monitoring of development activities, and support for an Aboriginal-led research program (refer to *Appendix D (Updated mitigation measures)* in the Amendment Report).

5.6.3 Management and mitigation

Submitter ID numbers

S-94876957, S-94900217

Summary of issues

Submitters commented on the proposed Aboriginal heritage mitigation and management measures. Comments included:

- how EnergyCo will ensure contractors will abide by the requirements of the EIS including any strategies that will be in place to prevent unapproved impacts to Aboriginal sites or places
- whether Aboriginal people will be present during construction
- how Aboriginal people will be employed and trained through the project
- the deferral of the Aboriginal cultural heritage management plan to post-approval.

Response

The mitigation measures proposed will inform the Conditions of Approval for the project. Contractors will be required to comply with the mitigation measures in the EIS and the Conditions of Approval during detailed design and construction of the project.

The mitigation measures identified in the EIS include the requirement for the development and implementation of an Aboriginal cultural heritage management plan (ACHMP) (AH01). It is typical for management plans such as the ACHMP to be developed during the post-approval phase as these are informed by the Conditions of Approval and would be developed by the network operator and the contractor.

The ACHMP will be co-designed with the registered Aboriginal parties (RAPs) and key stakeholders for the project. The requirements for the ACHMP are included in mitigation measure AH04 in the *Appendix D (Updated mitigation measures)* of the Amendment Report. This includes requirements to implement a hierarchy of management for Aboriginal objects, sites and places of moderate and high significance within and near the project impact area, including steps to avoid, minimise and mitigate impacts. It also includes processes, timing, communication methods and project involvement (e.g. on-site activities) for maintaining Aboriginal community consultation and participation through the remainder of the project, which would include a grievance mechanism that is readily available and designed for use by the local Aboriginal community. The RAPs would also be involved in discussions for any areas of design optimisation to avoid and further minimise harm to identified Aboriginal objects, sites and places.

With regard to the prevention of unapproved impacts to Aboriginal sites and places, mitigation measure AH01 in *Appendix D (Updated mitigation measures)* of the Amendment Report includes the requirement for all potential impacts to Aboriginal objects, sites and places to be reviewed once a final project design is available. The findings of this review will be provided to the registered Aboriginal parties and Heritage NSW, and management of any sites identified as being impacted will be integrated into the ACHMP. The ACHMP will also include procedures for managing the unexpected discovery of Aboriginal objects, sites and places during construction.

With regard to Aboriginal employment and training, EnergyCo is committed to creating positive outcomes for Aboriginal people, families and communities through the project. At least 1.5 per cent

of the project's contract value will go towards Aboriginal employment, business and training opportunities, in line with First Nations guidelines. As the project progresses through approval, detailed design and construction, EnergyCo, the network operator and design and construction contractors will continue to engage with Aboriginal organisations, groups and individuals to minimise impacts and maximise opportunities.

5.7 Landscape and visual

5.7.1 Impact assessment approach

Submitter ID numbers

S-92240456, S-94697206, S-94818719, S-94956774, S-94965556, S-94995477, S-95012245, S-95028957, S-95104707

Summary of issues

Submitters raised concerns or questioned the approach to the landscape character and visual impact assessment. This included:

- why a low landscape sensitivity rating was assigned to the Millfield area with the assessment identifying that it had 'no unique or distinctive qualities'. It was argued that the town has historical importance, the views across to Mount Baker, Pokolbin Mountain Range, the valley floor and Wollombi Brook are important to rural residential and accommodation properties in the area, and is also used for photography, weddings and TV filming
- concern regarding the perceived understatement of the visual sensitivity of the landscape near Pokolbin, noting that visual impacts are expressed as a high priority for assessment in the Cessnock Development Control Plan and Local Environmental Plan for the Vineyards District
- why the assessment was limited to views from residences within 1.6 kilometres despite a perception that visual impacts would extend beyond that
- perceived lack of assessment, site visits and photomontages prepared for views from Mount View Road and specific residences in Millfield and that views across the open landscape west of Millfield and south of Congewai Creek are not adequately captured
- the lack of a detailed site-specific assessment from key tourism vantage points such as Pokolbin Mountain lookout and the main approaches along Pokolbin Mountains Road
- concern about the lack of detail on the exact location or number of towers on Pokolbin Mountain to inform the assessment of the impact on views from a private property
- an error in the street address assigned to viewpoint reference PR-C19.

Response

Landscape sensitivity ratings

A landscape character and visual impact assessment was prepared to support the EIS for the project and was included as *Technical Report 3 – Landscape character and visual impact assessment* and summarised in *Chapter 10 (Landscape and visual)* in the EIS. As explained in *section 3.4 of Technical Report 3 – Landscape character and visual impact assessment*, landscape sensitivity ratings that apply to the assessment are listed in *Table 3-1* and incorporate the scenic

quality values identified in the *Transmission Guideline, Technical Supplement for Landscape Character and Visual Assessment Technical Supplement* (DPHI 2024) (Technical Supplement). The guideline includes a description of scenic quality values and images of scenic quality (shown in *Figure 3-6 of Technical Report 3 – Landscape and visual impact assessment*).

The scenic quality of Millfield met the guideline's description and images of 'low scenic quality' as it most-closely matched 'low' for most elements (landform, vegetation, waterbodies, social and cultural) and most-closely matched 'moderate' for 'human presence'. The town is not listed as a heritage site, and designations of historic or scenic significance were not identified in local or NSW strategies or plans. Views of Mount Baker, the Pokolbin Mountain Range, the valley floor and Wollombi Brook add to the character and attractiveness of the town, however, do not change the overall scenic quality rating following the guideline descriptions. To arrive at the overall 'low' sensitivity rating, the scenic quality rating was considered together with the number of people that experience the landscape using *Table 3-1 of Technical Report 3 – Landscape and visual impact assessment*. The result was a 'low sensitivity' rating however this does not detract from the scenic values that locals and visitors appreciate in the area but rather is specific to the way the guidelines describe sensitivity in the context of landscape assessment.

Consideration of the landscape sensitivity near Pokolbin

As explained in *section 3.3 of Technical Report 3 – Landscape and visual impact assessment*, the landscape assessment study area is defined in accordance with the *Transmission Guideline, Technical Supplement for Landscape Character and Visual Assessment Technical Supplement* (DPHI 2024) (Technical Supplement). Pokolbin and vineyards in the vicinity of Pokolbin, are beyond the landscape character assessment study area. Between Pokolbin and the project, the landscape is quite densely vegetated and was categorised as either landscape character zone (LCZ) Forested hills (which was assessed to have 'moderate sensitivity') or LCZ 12 Managed forestry (which was assessed to have 'low sensitivity'). Changes to access tracks and laydown areas in the State Forests as part of the amended project, which are contained within LCZ 12 (Managed forestry) would increase the magnitude of change during construction from low to moderate, however, the overall landscape character impact would remain low, consistent with the assessment provided in the exhibited EIS for this LCZ. For further details, refer to *Chapter 5 (Assessment of impacts)* and *Appendix G (Landscape and visual impact assessment addendum)* of the Amendment Report.

The visual impact assessment study area

As explained in *section 3.3 of Technical Report 3 – Landscape and visual impact assessment*, the visual assessment study area is defined in accordance with the Technical Supplement. The extent of the visual study area is relative to the height of the proposed towers and determined by applying the graph in *Figure 7 of the Technical Supplement*. Given the maximum height of the towers for the HTP is 85 metres, a 1.625-kilometre study area has been adopted. In those areas beyond the visual assessment study area, the transmission line may be visible, but due to the distance, there would not be a moderate or higher visual impact according to the methodology prescribed in the Technical Supplement.

Assessment of specific views and residences

As explained in *section 3.5.1.4 of Technical Report 3 – Landscape and visual impact assessment*, the proportionate visual assessment process is undertaken for all public and private viewpoints within the study area and outside the rural setback (refer to *section 3.5.1.3 of Technical Report 3 –*

Landscape and visual impact assessment for further details on rural setback). The proportionate visual impact assessment includes three levels of assessment that are progressively more detailed: simple, intermediate and detailed assessment. A viewpoint continues to the next level of assessment if the visual impact is identified as moderate or higher.

There are six private viewpoints in Millfield located within the 1.625-kilometre study area that underwent a proportionate visual assessment. All were determined to have a low potential impact during the simple assessment. Refer to *sections 3.5.1.4 to 3.5.1.7 of Technical Report 3 – Landscape and visual impact assessment* for an explanation of the simple assessment. A site visit and photomontage are only undertaken for private viewpoints that require a detailed assessment.

For public viewpoints, a range of locations were selected that represent places the local community can view the project including local roads, highway and scenic routes, and rest stops. *Technical Report 3 – Landscape character and visual impact* identified two public viewpoints in Millfield, 08: Wollombi Road (looking east) and 09: Wollombi Road (looking west). The simple assessment determined 08: Wollombi Road (looking east) would have a potential moderate visual impact and 09: Wollombi Road (looking west) would have a very low impact. Additional potential visual impacts compared to the exhibited EIS would occur at public viewpoints 08 and 09 on Wollombi Road, west of Millfield, as a result of the inclusion of the temporary worker accommodation at the Wollombi Road construction support site which would result in an increase in the amount of site infrastructure during construction, including additional buildings. Visual impacts as a result of the addition of the temporary worker accommodation would be temporary, with the facility and the entire construction support site to be decommissioned and rehabilitated as required following construction. For further details, refer to the *Chapter 5 (Assessment of impacts)* and *Appendix G (Landscape and visual impact assessment addendum)* of the Amendment Report.

As EnergyCo had received requests from the community to see photomontages of the project, and access to the public viewpoints were readily available for photography, all public viewpoints identified as moderate or high impacts proceeded to a detailed assessment without undertaking the interim intermediate assessment step. The detailed assessment determined that the project would have a low visual impact at 08: Wollombi Road (looking east). Refer to *section 6.2.1.3 of the Technical Report 3 – Landscape and visual impact assessment* for the full detailed visual assessment.

In response to further requests from the community, photomontages were created for two additional public viewpoints located at the outskirts of Millfield (Sixth Avenue) and on Mount View Road (refer to *Figure 5-1* and *Figure 5-2* of this Submissions Report). An aerial perspective photomontage was also completed for Millfield (refer to *Figure 5-3* of this Submissions Report).

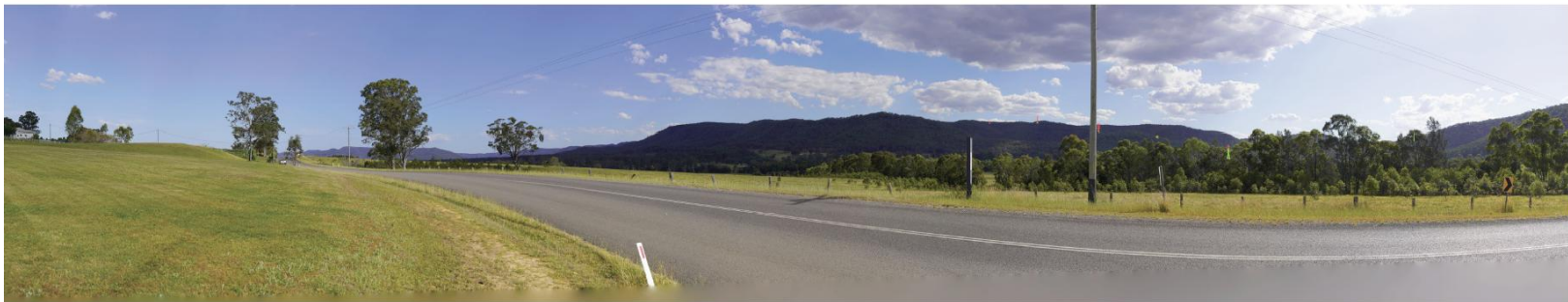
In the landscape character assessment, Millfield is characterised as LCZ 9: Millfield suburban area. Mount View is outside the five-kilometre landscape character study area but is adjacent to LCZ 10: Congewai Creek Rural Valley. The landscape character assessment determined both LCZs would experience a negligible magnitude of change and the overall landscape character impact would be negligible. The project would not directly impact or alter existing physical characteristics of LCZ 9: Millfield suburban area. The HTP corridor would be beyond the visual setting of the residential area and would not have a material effect on its sense of place. The project would not directly impact LCZ 10: Congewai Creek Rural Valley or alter existing physical characteristics of the LCZ.

Mount View Road, Millfield

Photomontage - including indicative transmission structure locations



Photomontage with project in silhouette (red in view, green out of view)



Viewpoint location



Hunter Transmission Project
Landscape and visual impact assessment
Public viewpoint photomontage

Date: October 2025 1

Figure 5-1 Photomontage from Mount View Road, Millfield

Corner of Sixth Avenue and Eighth Avenue, Millfield

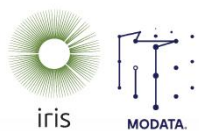
Photomontage - including indicative transmission structure locations



Photomontage with project in silhouette (red in view, green out of view)



Viewpoint location



Hunter Transmission Project
Landscape and visual impact assessment
Public viewpoint photomontage

Date: October 2025 1

Figure 5-2 Photomontage from Sixth Avenue, Millfield



Figure 5-3 Aerial perspective photomontage from Mount View Road, Millfield

Assessment of key tourism vantage points

The assessment identified and assessed key tourism vantage points within the study area including Flat Rock Lookout and sensitive viewpoints beyond the study area. The latter were identified by government agencies (refer to *Table 1-2 of the Technical Report 3 – Landscape character and visual impact*). Pokolbin Mountain lookout and the main approaches along Pokolbin Mountains Road were not considered in the visual assessment as they are over five kilometres from the HTP corridor (the visual study area is 1.625 kilometres from the HTP corridor). Any distant views towards the HTP corridor would be partly screened by intervening vegetation.

The Pokolbin, Corrabare, Watagan and Olney State forests are included within landscape character impact assessment as LCZ 12 – Managed Forestry. LCZ 12 is recognised as supporting recreational use of the forests via camping and picnic areas, walking trails and lookouts. Further information on the landscape character assessment is provided in *Technical Report 3 – Landscape character and visual impact* of the EIS.

Available detail on tower locations

Indicative locations for the transmission line towers were used in the visual assessment and the production of photomontages to determine impacts to public and private viewpoints. The indicative tower locations can be viewed in *Appendix J of Technical Report 3 – Landscape character and visual impact assessment*, viewpoint assessment results summary plan and photomontages. The final tower locations would be subject to detailed design, however, would be generally in the locations shown.

Error in the street address assigned to viewpoint reference PR-C19

This error has not been found in the EIS. As the assessment has been based on the GPS location of each dwelling the assessment remains unchanged.

5.7.2 General landscape and visual impacts – construction

Submitter ID numbers

S-94697206, S-94946207, S-94995477, S-95004721, S-95114956

Summary of issues

Submitters raised concerns regarding the potential landscape character and visual impacts of the project during construction. Concerns included:

- the impact on the landscape during construction including views from access tracks and roads such as Mount View Road, Wollombi Road, Pokolbin Mountains Road and Freemans Drive and more generally near Pokolbin Mountain and Mount Baker
- artificial lighting in the landscape from proposed worker accommodation and construction sites on Wollombi Road and Mount View Road.

Response

The landscape character and visual impact assessment for construction is presented in *sections 10.3 and 10.4, Chapter 10 (Landscape and visual)* and *Chapter 5 and 6 of Technical Report 3 – Landscape character and visual impact* of the EIS. This considered impacts during the day and at night.

A landscape character and visual impact addendum has been prepared to support the Amendment Report to assess the potential landscape character and visual impacts of the amended project (*Appendix G (Landscape character and visual impact assessment addendum)* of the Amendment Report). The visual impact assessment recognises that Public Viewpoint 08 and 09 Wollombi Road would experience the highest change to the view during construction. A large construction support site would be located adjacent to Wollombi Road, west of Millfield. The construction support site with temporary worker accommodation would be clearly visible, close to public road users, and activities within the support site would occur 24 hours a day. The site and activities would significantly contrast the existing view. Helicopter activities may temporarily draw attention as aerial movement would be a new element in the landscape. It is not, however expected that this construction support site and temporary worker accommodation would be prominent in views from Mount View Road, due to the distance and extent of intervening vegetation. Refer to *section 5.7.1* of this Submissions Report for further details on visual impacts from the Wollombi Road construction support site with temporary worker accommodation.

Construction changes would also be noticeable from Freemans Drive, where the worker accommodation and support site would be visible through surrounding trees which would filter views of activities at the site. The construction support site would be in place for about 2.5 years. During this period, activities at the site would be visible for short periods, while in transit, travelling past the construction support site. Following construction, construction support site infrastructure would be removed, and the site would be reinstated and returned to its former use.

The road upgrades on Pokolbin Mountains Road and Mount Baker Road would be visible from nearby sensitive receivers and road users for a short period. Pokolbin Mountains Road and Mount Baker Road are identified as construction access routes. There would be a temporary and intermittent visual impact from construction vehicles along these routes however this would be the only construction elements visible.

At night there would be temporary visual impacts from public roads with a view to the construction support sites and temporary worker accommodation on Wollombi Road. The level of impact will vary according to the visibility (distance and intervening landform and vegetation) and sensitivity of the viewing location. With the amended project, views from Wollombi Road would experience the most significant nighttime impacts, as lighting at the temporary worker accommodation would contrast with the existing level of night lighting. Impacts would occur for a short period, while in transit, travelling past the construction support site. For further details, refer to *Chapter 5 (Assessment of impacts)* and *Appendix G (Landscape and visual impact assessment addendum)* of the Amendment Report.

5.7.3 General landscape and visual impacts – operation

Submitter ID numbers

S-92611207, S-92686707, S-93580456, S-94818719, S-94879975, S-94952721, S-94965494, S94995477, S-95028957, S-95090232, S-95096004, S-95104707, S-95108231, S-95109456, S95114715, S-95114723, S-95117720, S-95119958

Summary of issues

Submitters raised concerns regarding the potential landscape and visual impacts of the project during operation. Specific concerns included:

- the visual impact from loss of trees in State forests including Pokolbin State Forest and that this would affect recreational users during bushwalks, picnics, scenic drives and camping
- the transmission lines, towers and vegetation clearing would impact the landscape character and scenic qualities of the Hunter Valley as a whole and including Millfield and Mount View.

One submission commented that they were not concerned as transmission infrastructure is already a feature of the existing landscape and the character of the landscape, with the project, would likely be similar to what currently exists.

Response

Visual impacts on recreational users within State forests

The State forests including Pokolbin State Forest are characterised as LCZ 12 Managed forest in the *Technical Report 3 – Landscape and visual impact assessment*. The nature of State forestry land is that it is managed primarily for the supply of timber. The landscape sensitivity of the LCZ has been rated as low given the LCZ along the route of the project is actively harvested state forest in several areas. The scenic quality ranges from moderate (where there are tall, dense trees) to very low (at clear felled areas). The scenic qualities associated with vegetation within the forestry areas can vary over time due to the State forest designation. There are several recreation areas including camping, picnic areas and trails through this LCZ with notable scenic values. *Appendix G (Landscape character and visual impact assessment addendum)* of the Amendment Report found that visual impacts within LCZ 12 to be consistent with the EIS.

The transmission towers and lines would be a new and noticeable element in the landscape; however, given the dense trees, visual exposure would be limited to the (relatively) low-use forestry tracks. The visual impact assessment concluded there would be no – low visual impact on three State forest public viewpoints including 10: Flat Rock Lookout, 11: Olney Headquarters campground and picnic area and 12: Watagan Forest Road, given the HTP corridor was not visible from these viewpoints. As mentioned above, the visual exposure would be limited to forestry tracks. The detailed assessment including photomontages are included in *Appendix I* of the *Technical Report 3 – Landscape and visual impact assessment*

Viewpoint 11: Olney Headquarters campground and picnic area was taken at the entry to the picnic area where there were no intervening trees. This represents a view worse than what would be seen from within the picnic area and camping areas. This viewpoint was selected as it is the closest of those recreational facilities east of Watagan Forest Road to the HTP corridor, which includes Old Mill picnic area, Casuarina camping area, Turpentine camping area; The Pines camping area; Pines

Forest Park, and Pines picnic area. These sites are surrounded by trees and would have no view of the project.

Appendix G (Landscape character and visual impact assessment addendum) of the Amendment Report found that visual impacts from the State forest public viewpoints to be consistent with the EIS. No new recreational viewpoints were identified as requiring reassessment, and no additional visual impacts were identified for recreation sites.

Impacts on landscape character and scenic qualities of the Hunter Valley as a whole, including Millfield and Mount View

The location of the HTP corridor and key project components within the Hunter Valley have been developed in consideration of visual amenity, including through extensive consultation with landowners. This included:

- occupying operational forestry land (which has low visibility) and avoiding recreational areas within forestry land
- minimising vegetation clearance requirements where practicable, including development of refined vegetation clearance areas (including partial clearing and no-clearing zones) rather than full easement clearance
- avoiding national parks, conservation areas and cultural heritage places, wherever possible
- the transmission lines, towers and vegetation clearing would impact the landscape character and scenic qualities of the Hunter Valley as a whole and including Millfield and Mount View.

Overall, the extent of the Hunter Valley that the HTP would occupy would be minimal. And, for the most-part, the project has been aligned to be adjacent to existing transmission lines and within landscapes already disturbed by clearing, energy and mining, or industry. Importantly, the project would not impact the significant vineyard or equestrian landscapes within the Hunter Valley.

There are two locations along the HTP corridor where the project would affect landscapes that are relatively undisturbed and scenic. That is, landscapes that are not affected by mining, forestry or industry, have lower visibility of existing transmission lines and include views of vegetated, steep, rugged ranges contrasting an open, pastoral valleys.

The first is the transmission line crossing of the broad, open, Wollombi Brook rural valley floor (LCZ7). Around 2.5 kilometres of transmission towers (about six towers) and lines would be visible in the open landscape, with the scenic Pokolbin Ranges in the background. The project was assessed to have a moderate impact on the landscape character of the Wollombi Brook rural valley during construction, and during operation.

The second is a crossing between two steep ridges either side of a narrow rural valley near Wollombi Valley Road (LCZ11). The location is a focal point of views down the narrow valley between the ridges. During construction, there would be a construction support site (with temporary worker accommodation) within this landscape unit; a transmission tower would be installed on ridges either side of the valley; and a line (multiple conductors) strung between the towers across the valley. Although relatively short (less than a kilometre between the two towers), this section of the project would likely be prominent, and was assessed to have a high impact on landscape character during construction, and a moderate impact on landscape character during operation.

5.7.4 Impact to private views

Submitter ID numbers

S-92240456, S-94958737, S-94965456, S-94995477, S-95012245

Summary of issues

Submitters raised concerns regarding the impact to private views. Specific concerns included:

- that the transmission line towers would dominate the skyline and views from local residences, which would reduce the visual amenity and scenic setting of residences on Mount View Road, Oakley Lane and Cessnock Road, as well as properties used for tourist accommodation that looks over Millfield Valley
- impact on views from a cellar door looking over the Mount Baker ridge and the Corrabare and Watagan ranges which are likely to be changed by the transmission line infrastructure.

Response

The proportionate visual assessment undertaken for the project and included in *section 6.3 of Technical Report 3 – Landscape and visual impact assessment* of the EIS, identifies private viewpoints that would have views of the HTP corridor. The detailed assessment determined that receivers along Cessnock Road (IDs 465, 466 and 467) would have a moderate impact and receivers along Oakley Lane (ID 471 and ID 472) would have a low impact. However, mitigation measures (e.g. screening vegetation) are proposed to address the moderate visual impacts identified for the project. A revised assessment of these viewpoints was undertaken, incorporating the proposed mitigation opportunities to determine the residual impact rating. It was determined that the screening vegetation at ID 465 and ID 466 would not be effective as the visible towers are distant and any screening of the view would also obstruct the high scenic quality views of the rocky escarpments and ridgeline. As such, the residual impact rating for these two views would remain moderate. Opportunity for screening vegetation along the property boundary at ID 467 to reduce visibility of the project over time will be offered to the landowner, which would reduce the residual impact rating down to low. These residual impacts are consistent with the exhibited project. Refer to *Appendix G (Landscape character and visual impact assessment addendum)* of the Amendment Report for further details.

As noted in *section 5.7.1* of this Submissions Report, additional photomontages from public views were completed in response to community requests to demonstrate views of the HTP corridor from different locations in Millfield. *Figure 5-1 to Figure 5-3* show that there is limited visibility of the project from Millfield and properties on Mount View Road, due to the intervening landform including the Mount Baker ridge to the north and the Corrabare and Watagan ranges to the south. A small portion of the project infrastructure and potentially some easement clearing may be visible where the alignment crosses the valley between the Mount Baker Ridge and Corrabare Range, in the vicinity of Wollombi Road. Visibility would be limited to the upper portion of the towers which would be partly obstructed by intervening vegetation, depending upon the location, and some towers would be viewed against a background of vegetation, reducing their prominence in the view.

5.7.5 Management and mitigation

Submitter ID numbers

S-95028957

Summary of issues

A submitter suggested that further consideration should be given to the placement of towers to minimise landscape and visual impacts on tourist approaches, as well as a requirement for the revegetation of disturbed areas to restore scenic amenity and the preparation of a landscape and visual management plan.

Response

Mitigation measure B21 includes the implementation of clearing procedures, control measures and post- construction restoration measures identified to ensure, to the greatest extent practicable, biodiversity values are retained as assessed in *Technical Report 1 – Biodiversity development assessment report*, when clearing is relevant to biodiversity values.

As discussed in *section 4.6, Chapter 4 (Project description)* of the EIS, prior to the completion of construction, temporary areas used to support the construction of the project, such as construction support sites (including temporary worker accommodation) and laydown areas, would be decommissioned and rehabilitated as required. As outlined in *Chapter 12 (Land use and property)* of the EIS, pre-condition assessments of the construction impact area will be undertaken to determine the existing condition of assets, including general condition of the land.

As discussed in *section 10.4, Chapter 10 (Landscape and visual)* of the EIS, opportunities to minimise the potential landscape and visual impacts of the project have been considered in the design and alignment of the permanent infrastructure (see *Chapter 3 (Alternatives and options)*), in consultation with landowners (see *Chapter 6 (Engagement)*). This included:

- where possible, locating parts of the transmission line and switching stations in previously disturbed areas (such as the mining areas)
- consideration of the topography and any existing screening vegetation or other features
- maximising the distance between the transmission lines and towers and existing dwellings and towns
- minimising vegetation clearance requirements where practicable, including development of partial vegetation clearance areas rather than full easement clearance
- minimising impacts on conservation areas, cultural heritage places (such as Flat Rock lookout) and major recreation areas.

As discussed in *section A.5.1, Appendix A (Updated project description)* of the Amendment Report, controlled vegetation clearing will be implemented within and adjacent to the transmission line easement. *Figure A-22 of Appendix A (Updated project description)* of the Amendment Report outlines vegetation maintenance within the easement, disturbance area A (20 metres wide in the centre of the easement) will be cleared, disturbance area B (the remaining 50 metres of the easement) would be allowed to grow up to two metres in height.

The impact of construction lighting will be managed through LV3. The impact of vegetation retention will be managed through mitigation measure LV2. Visual changes near residences would be managed through mitigation measure LV4 which includes vegetation screening.

As detailed in *section 10.5.1, Chapter 10 (Landscape and visual)* of the EIS and *Appendix D (Updated mitigation measures)* of the Amendment Report, a landscape character and visual management plan will be implemented. This will identify the methods and protocols to be implemented to ensure that the project minimises impacts on landscape character, and visual impacts to public and private views. The LCVMP will include mitigation measures to manage:

- potential impacts on landscape character during the day during construction and operation
- potential impacts on landscape character at night during construction and operation
- potential impacts on views from the public domain during construction and operation where there is a moderate or higher potential visual impact
- potential impacts on views from private dwellings, that are not associated with property that is hosting project infrastructure, and that have a predicted moderate or higher potential visual impact during construction and operation
- details regarding the installation and maintenance of any proposed on-site mitigation measures such as vegetation for screening.

5.8 Traffic and transport

5.8.1 Impact assessment approach

Submitter ID numbers

S-92240456, S-94965458, S-94770457, S-94995477, S-95108971

Summary of issues

Submitters queried the generality, accuracy and reliability of the conclusions in the traffic and transport impact assessment. This was attributed to the limitations in data used or a lack of data, the level of stakeholder engagement, and/or errors and discrepancies in the EIS. These queries often related to the conclusions about the suitability and safety of the proposed construction routes. Specifically, submitters stated that the traffic and transport assessment:

- incorrectly identified the number of residences or businesses (agricultural, cafes, cellar doors or short-term accommodation) that are located along Mount View Road, Mount Baker Road and Pokolbin Mountains Road
- incorrectly described the physical characteristics of certain roads, being Mount View Road, Mount Baker Road and Pokolbin Mountains Road. Submitters stated that these are unsealed, narrow roads with steep banks that cannot cater for two-way traffic in sections and/or are unsafe to drive at the posted speed limit

- incorrectly characterised the use of certain roads, as mid-block traffic counts were not completed or were based on surveys completed outside periods when recreational or tourism traffic is high (being Friday and Saturday, or during school holidays). This includes traffic associated with visitors to wineries, accommodation and/or nature-based recreation (bushwalking, camping, etc)
- did not account for active transport occurring along McDonalds Road or Pokolbin Mountains Road or did not identify recreational users in Pokolbin State Forest. A submitter identified the potential conflict with parked cars by recreational visitors where proposed passing bays are identified
- relied on crash analysis data collected between 2018 and 2022, and as such, would not account for increased recreational traffic since 2022 on Pokolbin Mountains Road and Broken Back Road, or deterioration to road conditions and road safety due to increased visitation, bushfires, extreme weather, and increased vegetation growth.

In raising these concerns, submitters requested a revised traffic assessment is completed, informed by detailed traffic surveys with input from residents (including on proposed mitigations).

Response

A traffic impact assessment was prepared to support the EIS for the project and was included as *Technical Report 4 – Traffic and transport impact assessment* of the EIS and summarised in *Chapter 11 (Traffic and transport)*. In response to submission, including those from road authorities, a revised traffic and transport assessment has been undertaken as part of the Amendment Report to assess proposed amendments to the project since the exhibition of the EIS and to address specific feedback provided by stakeholders. The outcome of this revised assessment is detailed in *Appendix H (Revised traffic and transport impact assessment)* of the Amendment Report.

The concern regarding inaccurate identification of the type of land uses on Pokolbin Mountain, Mount Baker and Mount View roads, and the physical description of these roads within *Technical Paper 6 – Traffic and transport impact assessment* is noted. The traffic assessment has been updated in *Appendix H (Revised traffic and transport impact assessment)* of the Amendment Report to acknowledge the other uses on properties that are accessed via these roads and has been amended to clearly differentiate the condition of particular sections of these roads. Irrespective of these discrepancies, the EIS has acknowledged that these roads (or sections of in the case of Mount View Road) are unsealed and narrow, and road upgrades (such as passing bays) and mitigation measures are required to address impacts to property access and potential conflicts between construction vehicles and other road users. This is discussed further in *section 5.8.2* of this Submissions Report.

EnergyCo acknowledges the concern regarding the characterisation of road use and timing of traffic surveys. Intersection surveys were completed to capture network peak hours (for example, between 3pm to 7pm on a weekday). The mid-block traffic counts were conducted at key road locations to capture 24-hours and seven-days traffic data including volume, speed and vehicle classifications across this period (*section 3.5.2 of Appendix H (Revised traffic and transport impact assessment)* of the Amendment Report). The locations of mid-block traffic counts are listed in *Table 3.2 of the Appendix H (Revised traffic and transport impact assessment)* of the Amendment Report. Mid-block traffic counts did not inform the classification or description of roads but rather fed into the analysis of impacts. Traffic counts accounted for a range of scenarios based on the duration over which they were completed and are deemed a fair representation of the baseline

conditions on these roads to capture typical commuter and freight traffic patterns. These periods were selected in accordance with *Guide to Transport Impact Assessment (Transport for NSW, 2024)* which recommends avoiding atypical conditions such as weekends and school holidays, as that is generally when lower traffic conditions occur. It is recognised that this may not be the case for certain roads in the area and this has been acknowledged in *Appendix H (Revised traffic and transport impact assessment)* of the Amendment Report.

Appendix H (Revised traffic and transport impact assessment) of the Amendment Report accounted for established/formal active transport in section 4.7. EnergyCo acknowledges that recreational visitors and users of these roads may tend to park cars and walk along McDonalds Road or Pokolbin Mountains Road. Active transport and parking associated with recreational visitors will be considered in the detailed traffic management plan (mitigation measure TT1) that will be developed in consultation with the relevant road authorities, FCNSW, affected property owners, and emergency services.

At the time *Technical Paper 6 – Traffic and transport impact assessment* was prepared, the crash analysis data collected between 2018 and 2022 was the most up to date data available. More recent data has since been published. As such, the *Appendix H (Revised traffic and transport impact assessment)* of the Amendment Report has included the latest available crash data from 2020 to 2024.

5.8.2 Traffic impacts – construction

Submitter ID numbers

S-93336707, S-93580456, S-93943712, S-94045957, S-94193709, S-94320457, S-94410706, S-94513963, S-94697206, S-94770457, S-94818719, S-94946207, S-94952721, S-94956774, S-94958737, S-94965456, S-94965458, S-94965494, S-94965556, S-94995477, S-95004721, S-95012245, S-95016475, S-95028957, S-95096061, S-95104707, S-95106969, S-95108971, S-92240456, S-95114956

Summary of issues

Submitters expressed the view that the impacts have been underestimated or not clearly communicated, or issues raised during social impact assessment (SIA) engagement not been addressed in the traffic and transport impact assessment. More detail concerning the volumes, hours of use and how property access would be maintained (including during road works) was requested.

Submitters objected to and/or raised concerns about the proposed construction routes where the routes pass through towns (such as Millfield and Cooranbong) or where local or Crown roads are used due to:

- the volume of heavy vehicle movements
- duration and frequency of heavy vehicle movements, with some submitters expressing concern that high volumes of heavy vehicle movements would occur seven days a week for two years or more, or that movements would occur outside of standard construction hours
- unsuitability of the roads for heavy vehicles, irrespective of any proposed upgrades or treatments.

These objections and/or concerns were primarily associated with the impacts to residents, school children, emergency services, businesses and/or tourists due to changes in road safety, road condition, property access and travel times. Specific concerns included:

- certain roads are not suitable for heavy vehicles and/or the proposed construction vehicle volumes, given the road condition, road surface, drainage issues or road width with roads often described as being narrow and winding with poor sightlines, and/or being in poor condition. It was requested that alternative construction routes or transmission line corridors are considered to avoid use of roads such as Pokolbin Mountains Road, Broken Back Road, Mount View Road, Mount Baker Road, Freemans Drive, Wollombi Road and forestry roads
- the increase in heavy vehicle volumes would damage roads or related infrastructure (such as bridges), impacting road safety and accessibility to properties, businesses and recreational areas. Further, submitters were concerned that road damage would not be rectified during construction
- the provision of passing bays will not address issues concerning its existing condition or impacts to road safety and accessibility (including cumulative impacts and travel delays). It was requested that the full length of Pokolbin Mountains Road be upgraded in addition to passing bays
- road upgrades, construction of passing bays or ongoing road maintenance activities would impact travel times and accessibility for residents and emergency services, with submitters identifying the absence of alternative routes during these works and delays recently experienced during road works. This included impacts to properties along Pokolbin Mountains Road, Broken Back Road and Watagan Road
- poor driver behaviour, such as speeding, by construction staff or general public on narrow roads and conflict with construction vehicles
- impacts to the safety of school children, with submitters raising concern with the potential conflict with student drop off/pick up on Wollombi Road at Millfield Public School, and conflicts with school children travelling to/from school given the lack of footpaths
- existing safety concerns at the Avondale Road intersection and Martinsville Road intersection, which would be worsened by construction traffic and requires traffic controls.

Response

Construction access routes and the indicative maximum daily traffic movements generated by construction are detailed in *section A3.5, Appendix A (Updated project description)* of the Amendment Report. Heavy and light vehicle traffic generated by the project would be distributed across the construction access routes. To assess the potential impacts on the road network, the traffic impact assessment had applied a worst-case scenario that represented the HTP hourly peak volume during the peak construction year (2028). This has been updated in *Appendix H (Revised traffic and transport impact assessment)* of the Amendment Report to account for the HTP hourly peak volume occurring in the network AM or PM peak hour when background traffic volumes are high, except when the AM network peak occurs before 6am. However, not all construction routes would be used for the entire construction period, and construction traffic volumes on any particular construction access route would fluctuate (reduce) according to the time of day and the stage of construction.

EnergyCo notes concerns about proposed construction routes through towns such as Millfield and Cooranbong and where local or Crown roads are proposed for use. *Section 3.7.1 of the Appendix H (Revised traffic and transport impact assessment)* of the Amendment Report describes the selection of construction routes. The selection of construction access routes was informed by a review of the concept design and early construction planning and has:

- prioritised roads that provide connection to construction support sites, the construction impact area (and access tracks determined in consultation with landowners) and broader State and regional road network
- been informed by impact assessment outcomes, including level of service, turn warrant and sight distance assessments
- determined in consultation with relevant stakeholders including Transport for NSW and local councils.

It is acknowledged that this would necessitate the use of sealed and unsealed local and Crown roads, particularly to access forestry roads and where topography or other environmental constraints limit access along the HTP corridor.

As noted in *section A.4.6 of the updated project description (Appendix A of the Amendment Report)*, construction of the project would generally be carried out during recommended standard hours as defined by the Interim Construction Noise Guideline (NSW Department of Environment and Climate Change (DECC) 2009, being Monday to Friday, 7am to 6pm, and Saturday 8am to 1pm. Worker accommodation facilities would be operational 24 hours per day, seven days per week, however this would be for occupancy rather than associated with any construction related activities on site. It is acknowledged in *section A.4.6 of the updated project description (Appendix A of the Amendment Report)* that construction work may be required for discrete activities for safety, technical or public infrastructure operational reasons (e.g. to minimise utility and traffic disruptions). This would require some construction vehicle movements outside standard construction hours to support these activities, which would be subject to notification and management plan conditions as set out in *Appendix D (Updated mitigation measures)* of the Amendment Report.

EnergyCo notes there are concerns about some of the suitability and the condition of the roads for heavy vehicles. An existing conditions assessment was undertaken as part of the traffic impact assessment which involved undertaking both site inspections, and desktop and mapping analysis to identify, describe and qualitatively assess the existing conditions of proposed construction traffic routes (refer to *section 3.5 of Appendix H (Revised traffic and transport impact assessment)* of the Amendment Report for further details). As described in *section 5.2.1 of this Submissions Report* and *section 5.3.12 of Appendix H (Revised traffic and transport impact assessment)* of the Amendment Report, upgrade works would be required in several locations along the construction routes, including at key intersections, to cater safely for the proposed construction traffic volumes and delivery of oversized equipment or construction material, and ensure public road safety. The likely scope of these works are listed in *Table A-10 and A-11 of the updated project description (Appendix A of the Amendment Report)* and locations identified in *section 5.3.12 of Appendix H (Revised traffic and transport impact assessment)* of the Amendment Report.

Pre-construction road dilapidation surveys and routine inspections will be completed along all nominated construction routes on local roads (mitigation measure TT6). Where rectification works are required due to project impacts, consultation with the appropriate road authority will be undertaken to confirm the scope of the work required.

EnergyCo recognises the challenges on many of the roads (such as Pokolbin Mountains Road) and that some submitters would like the condition of these roads to be improved or alternatives considered to address concerns about road safety and impacts to property access. EnergyCo is committed to working with the community to ensure each road is fit for purpose for both the construction workforce and the local community. In consultation with residents on Pokolbin Mountains Road since the exhibition of the EIS, an additional mitigation measure has been included to account for further consultation on the development of a property access sub-plan as part of the traffic management plan (refer to *Appendix D (Updated mitigation measures)* of the Amendment Report). This will detail site specific traffic control measures, requirements and methods to engage and inform the local community of impacts on the local road network, and how these works would be coordinated. EnergyCo acknowledge the challenges of upgrading/constructing passing bays on these roads given the lack of alternatives and the need to work with the local residents to ensure this is done as safely and as efficiently as possible.

A road safety impact assessment was undertaken as part of the traffic impact assessment and is included in *section 5.3.8 of Appendix H (Revised traffic and transport impact assessment)* of the Amendment Report. The interaction that the project traffic has with the road network will typically be at construction access points and on the proposed construction routes between the construction support sites and work areas. Safety for workers and other road users at these locations is important for the success of the project. A summary of potential road safety issues, their associated impacts and potential mitigation strategies to minimise them are included in *Table 5.60 of Appendix H (Revised traffic and transport impact assessment)* of the Amendment Report. Where required, mitigation measures have been included in *Appendix D (Updated mitigation measures)* of the Amendment Report, including intersection upgrades, restrictions of use (mitigation measure TT3) and the provision of additional advance warning signs, temporary reductions in speed limits or clearing of vegetation in consultation with the relevant road authority where required (mitigation measure TT2).

EnergyCo recognises the safety concerns regarding school children on Wollombi Road at Millfield Public School, especially given the lack of footpaths. Road safety, especially around sensitive sites such as schools, will be considered in the detailed traffic management plan and traffic control plans that will be developed in consultation with the relevant road authorities, FCNSW, affected property owners, and emergency services. The traffic management plan will also include a driver code of conduct to define acceptable driver behaviour, promoting road safety and minimising the impacts of construction related vehicle movements on local roads and community. This will govern the way that construction workers are required to drive, including adhering to speed limits etc. Where required for road upgrades, traffic management will be in place to police speed limits, including for the general public.

EnergyCo recognises the safety concerns at Freemans Drive/Avondale Road intersection and Freemans Drive / Martinsville Road. According to the NSW Crash data from 2020 to 2024 (sourced from Transport for NSW's Open Data platform), there was one crash (in 2021) near the Freemans Drive / Avondale Road intersection and no crashes recorded near the Freemans Drive / Martinsville Road intersection over the past five years. The Freemans Drive / Martinsville Road intersection is proposed to be upgraded with a channelised right turn due to the additional construction traffic that would be turning at that intersection. Project works at this intersection will be coordinated with Lake Macquarie City Council to not preclude Council's upgrade of this intersection, and this is reflected in the mitigation measures provided in *Appendix D (Updated mitigation measures)* of the Amendment Report. No construction traffic is proposed to turn at the Freemans Drive / Avondale Road intersection.

The only works proposed at the Freemans Drive / Avondale Road intersection are the removal of signs and barriers temporarily on the median refuge to allow for the auxiliary services building to be transported to Olney switching station (OSOM movement) (refer to *section 5.3.4 of Appendix H (Revised traffic and transport impact assessment)* of the Amendment Report).

5.8.3 Traffic impacts – operation

Submitter ID numbers

S-95105488

Summary of issues

A submitter questioned the conclusion that the project would unlikely have a noticeable impact on the road pavement condition in the study area, given it had not accounted for the changes to the road as a result of the project or the cumulative impact of other users of this road (e.g. use by Forestry Corporation and telecommunication authorities, and the observed increase in recreational visitation).

Response

Section 6.2 of Appendix H (Revised traffic and transport impact assessment) of the Amendment Report assesses the operational impacts of the project. Routine maintenance activities would typically only require a light vehicle or sometimes a light truck with a small crew. Routine inspections and maintenance would occur on a monthly and yearly frequency. The daily movement number can be as high as 10 vehicle movements however would typically be much less than that. Due to the low traffic movements and minimal heavy vehicles involved in the maintenance activities, they are unlikely to have a noticeable impact on the road pavement condition throughout the traffic and transport study area and the contribution to cumulative impacts would be negligible.

5.8.4 Management and mitigation

Submitter ID numbers

S-94045957, S-94320457, S-94513963, S-94697206, S-94780957, S-94956774, S-94965458, S-94995477, S-95016475, S-95028957, S-95104707, S-95105488, S-95108971, S-92240456.

Summary of issues

Submitters requested that a construction traffic management plan is developed in consultation with the local community, businesses and local councils to ensure minimal disruption to residents and businesses during construction. It was requested that any changes are communicated to the local community and local councils, and that specific sub-plans are prepared for key roads.

Submitters made specific comment on road condition / dilapidation assessments and maintenance requirements. This included the request for:

- assessments to be completed prior to and at completion of construction with regular inspections and maintenance during construction and during wet weather
- pre and post construction assessments should be supported by geotechnical surveys where roads have experienced landslips
- assessments, inspections and the maintenance of roads to be at EnergyCo's cost and any upgrades identified by the assessment are to be completed prior to construction with provision for the rehabilitation of the full pavement depth
- reports and maintenance actions to be made publicly available with independent auditing and verification of road condition assessments to ensure transparency and accountability
- reclassification of any new or upgraded access roads constructed for the transmission line as regional or state roads so that the long-term maintenance responsibility is with the State government not local Council and ratepayers.

Submitters raised concern or criticised the adequacy of the mitigation measures identified in the EIS to address road safety and efficiency impacts or impacts to accessibility. In doing so, submitters requested:

- further detail on what improvements would be delivered as part of the project for construction routes prior to, during and after construction to address road safety and efficiency concerns, such as road surface upgrades, road widening, drainage improvements, speed reductions, signage, roadside barriers. This included Pokolbin Mountains Road and Broken Back Road, and the provision for ongoing funding to local council following the completion of construction to maintain upgraded roads or road infrastructure
- further detail on traffic control measures and access controls where a construction route or transmission line easement passes through a property to manage conflicts between agricultural activities and vehicles.

A number of these concerns or criticisms related to roads where passing bays would be provided. In addition to the above, submitters:

- criticised the general inconvenience of having to coordinate departures with a traffic controller, including questions on the logistics of how this would be managed and the unreliability of phone network coverage

- queried why more passing bays have not been provided
- requested a number of additional mitigation or performance measures, including:
 - a temporary and/or permanent reduction in the posted speed limit and additional signage
 - commitments that access is maintained during construction, and that maximum wait times are established in construction traffic management plans
 - measures to ensure residents and school student commute times are not significantly impacted by construction vehicles
 - minimum notification periods for any road closures, road works or detours, with provision of real-time updates through existing systems (NSW Live Traffic) and a direct communication system (SMS/email) for registered residents and businesses
 - provision of a 24/7 contact number for access issues and emergencies
 - a requirement that roads remain accessible at set times to allow for residents, visitors, tourist operators and services providers to travel reliably (such as during peak travel times)
 - restriction of construction traffic movements to weekdays and standard working hours.

Response

A traffic management plan will be implemented to manage the potential traffic and transport impacts of the project as described in mitigation measure TT1 (refer to *Appendix D (Updated mitigation measures)* of the Amendment Report). The traffic management plan and supporting Traffic Control Plans will be developed in consultation with the relevant road authorities, FCNSW, affected property and business owners, and emergency services. The requirements for site inspections and auditing will be detailed within traffic management plan.

Prior to construction, pre-construction road dilapidation surveys and routine inspections are covered in mitigation measure TT6 (refer to *Appendix D (Updated mitigation measures)* of the Amendment Report). The surveys and inspections will be completed along all nominated construction routes on local roads. Where rectification works are required due to project impacts, consultation with the appropriate road authority will be undertaken to confirm the scope of the work required. The intention of these surveys and inspections will be to identify any required upgrades and complete the upgrades prior to construction. Road upgrades that would be undertaken as part of the HTP would not result in a reclassification of roads. All required upgrades or required rectification works will be at the cost of EnergyCo.

As described in section A.3.5 of the updated project description (*Appendix A* of the Amendment Report) and section 5.3.12 of *Appendix H (Revised traffic and transport impact assessment)* of the Amendment Report, upgrade works would be required in several locations along the construction routes, including at key intersections, to cater safely for the proposed construction traffic volumes and delivery of oversized equipment or construction material, and ensure public road safety. Further detail on what improvements would be delivered as part of the HTP for construction routes would be defined during detailed design, including road surface upgrades, road widening, passing bays, drainage improvements, speed reductions, signage and roadside barriers.

Further detail on traffic control measures and access controls where a construction route or transmission line easement passes through a property will be dealt with through property management plans (mitigation measure LP2, *Appendix D (Updated mitigation measures)* of the Amendment Report)). This includes 'measures to minimise disruption to agricultural or other

practices during construction, including identification of [...] vehicle movements and other construction activities in the vicinity of livestock’.

As discussed in section 5.8.2 of this Submissions Report, an additional mitigation measure has been included to account for further consultation on the development of a property access sub-plan as part of the traffic management plan to manage conflicts along certain roads, such as Pokolbin Mountains Road (refer to *Appendix D (Updated mitigation measures)* of the Amendment Report). This will detail site specific traffic control measures, requirements and methods to engage and inform the local community of impacts on the local road network, and how these works would be coordinated. EnergyCo acknowledge the challenges of upgrading/constructing passing bays on these roads given the lack of alternatives and the need to work with local residents to ensure this is done as safely and as efficiently as possible.

All accesses will be designed to accommodate the required construction vehicle(s) requiring access, and in accordance with relevant Austroads guidelines (where applicable) and in consultation with the relevant roads authority. To address road safety concerns related to construction vehicle drivers, mitigation measure TT1 commits to the development and implementation of a Driver Code of Conduct. This code will define acceptable driver behaviour for project personnel, promoting road safety and minimizing the impacts of construction-related vehicle movements on local roads and the community. Additionally, a driver fatigue management plan will be developed and implemented as part of the traffic management plan (mitigation measure TT1, *Appendix D (Updated mitigation measures)* of the Amendment Report).

EnergyCo notes the mitigation measures recommendations. All the recommendations are already covered to a certain extent within the mitigation measures provided in *Appendix D (Updated mitigation measures)* of the Amendment Report and the current mitigation measures as follows:

- safety measures will be implemented as required at intersections assessed as being noncompliant with safe intersection sight distance criteria, including the provision of additional advance warning signs, temporary reductions in speed limits or clearing of vegetation in consultation with the relevant road authority
- access to properties will be maintained throughout construction, where feasible. Where access is not feasible, temporary alternative arrangements will be provided following consultation with the affected landowners
- the traffic management plan will include requirements and methods to consult and inform the local community of impacts on the local road network (including residents and businesses), provision of a response plan for any construction traffic incident and complaints management process.
- as detailed in section A.4.6 of the updated project description (*Appendix A* of the Amendment Report), construction of the project will generally be carried out during recommended standard hours as defined by the EPA’s Interim Construction Noise Guideline (ICNG) (being Monday to Friday, 7am to 6pm, and Saturday 8am to 1pm). Where out of hours work is required, construction traffic movements would be minimised in line with construction traffic noise management measures detailed in the construction noise and vibration management plan (mitigation measure NV1, NV3 and NV6, *Appendix D (Updated mitigation measures)* of the Amendment Report).

5.9 Land use and property

5.9.1 Impacts on property value

Submitter ID numbers

S-92240456, S-94697206, S-94956774, S-94965494, S-94995477, S-95012245, S-95090232, S-95104707, S-95108231, S-95114715, S-95114723

Summary of issues

Submitters expressed concerns about the impacts on property values from the project, particularly from a reduction in amenity. Some submitters requested compensation for the devaluation of their property and disturbance from the project.

Response

Impacts to amenity (visual, noise and vibration and air quality) were assessed in the EIS (see *Chapter 10 (Landscape and visual)*, *Chapter 16 (Noise and vibration)*, and *Chapter 22 (Other matters)*) and the Amendment Report (see *sections 5.4, 5.10, 5.17, Chapter 5 (Assessment of impacts)*). A range of mitigation measures identified in *Appendix D (Updated mitigation measures)* of the Amendment Report will be implemented during construction and operation to manage and minimise potential impacts to amenity.

Additionally, while submissions have raised concerns about perceived impacts on property values, transmission lines may have little impact on dynamic changes in house prices over time (Han & Elliott 2013). This is because over time, market factors such as location, accessibility, and broader economic trends tend to outweigh the localized influence of transmission infrastructure.

Where the project crosses private property, EnergyCo's priority is to work directly with the landowners to negotiate an easement. The easement agreement will outline the rights and responsibilities of both parties for the ongoing use of the land, as well as compensation. The assessment of compensation is made having regard to the provisions of the *Land Acquisition (Just Terms Compensation) Act 1991*. Section 55 of the Act provides that regard must be had to the following matters in assessing compensation for the acquired land. These matters are:

- the market value of the land on the date of its acquisition
- any special value of the land to the person on the date of its acquisition
- any loss attributable to severance
- any loss attributable to disturbance
- the disadvantage resulting from relocation
- any increase or decrease in the value of any other land of the person at the date of acquisition, which adjoins or is severed from the acquired land by reason of the carrying out of, or the proposal to carry out, the public purpose for which the land was acquired.

EnergyCo also grants monies to affected landowners to obtain their own independent valuation advice on compensation. A temporary lease will require a payment of rental from EnergyCo, and the compensation valuation considers the location, size, use and value of the underlying land.

Section 6.5.4, Chapter 6 (*Engagement*) of the EIS discusses the engagement approach carried out for the process.

Additionally, landowners directly hosting transmission lines are entitled to receive Strategic Benefit Payments (SBPs), which are provided in addition to compensation that has been assessed under the *Land Acquisition (Just Terms Compensation) Act 1991*. These payments are tied to the land and are in recognition of any burdens associated with hosting this infrastructure.

Mitigation measure LP2 also proposes that property management plans, developed in consultation with landowners hosting project infrastructure, will be implemented to address landowner concerns about the impacts of construction activities as outlined in the *Appendix D (Updated mitigation measures)* of the Amendment Report. Property management plans will include pre-condition assessments to assess the existing condition of assets, infrastructure, and utilities that are impacted by construction activities.

Impacts of the project during operation would be covered under easement terms agreements.

5.9.2 Impacts on State forest land uses

Submitter ID numbers

S-92686707, S-93336707, S-93943712, S-94818719

Summary of issues

Submitters commented on the impact of the transmission line on State forests (including the Watagans, Corrabare and Pokolbin State forests), which is public land that many people value for its biodiversity, cultural heritage and recreational land uses.

Response

Impacts to State forest land use and property associated with construction and operation of the HTP are assessed in *section 12.3.4* and *section 12.4.4, Chapter 12 (Land use and property)* of the EIS respectively. The EIS concluded that construction of the project would result in temporary impacts to State forests however on completion of construction, only the transmission line easement, new access tracks and the Olney switching station would be permanent.

The establishment of a permanent transmission line easement through State forest land would affect 0.32 per cent of Pokolbin State Forest, 1.3 per cent of Corrabare State Forest, and 2.94 per cent of Watagans State Forest. Furthermore, Olney switching station would affect 0.55 per cent of Olney State Forest. As such, the EIS concluded that permanent impacts to State forest land does not represent a significant disruption to forestry land use across the wider State forest area, although localised impacts are acknowledged.

Intermittent maintenance activities would, however, be required during operation in the transmission line easement, new access tracks, and the Olney switching station. Maintenance activities will be undertaken in accordance with the network operator's environmental management system developed in consultation with Forestry Corporation of NSW and will minimise disruption to State forest recreational land uses to the greatest extent practicable.

Residual impacts to biodiversity and heritage values of State forest associated with construction and operation of the HTP are discussed in *section 5.5* and *section 5.6* of this Submissions Report respectively.

EnergyCo undertook a detailed assessment of alternatives for the HTP corridor based on stakeholder consultation made with respect to avoiding impacts to Watagans, Corrabare and Pokolbin State forests which comprise important biodiversity, cultural heritage, and recreational land uses and values. Refinements made to avoid impacts, as detailed in *Chapter 3 (Alternatives and options)* and summarised in *section 25.3, Chapter 25 (Justification of the project)* of the EIS, include:

- moving the southern switching station to Olney State Forest to reduce the impacts on the Martinsville and Cooranbong communities
- relocating the transmission corridor further away from the major recreation areas in the Olney State Forest
- minimising impacts on Forestry Corporation of NSW's hardwood plantations in the Watagan State Forest
- pushing the transmission corridor further west in the Pokolbin and Corrabare State forests to reduce the extent of vegetation clearing, avoid impacts on threatened plants and animals, avoid major ridgelines and sightlines that have cultural significance for Traditional Owners and the local Aboriginal community and minimise visibility of transmission towers.

Chapter 3 (Description of amendments and refinements) of the Amendment Report outlines further refinements to temporary construction facilities, construction methodologies and transmission infrastructure based on consultation with stakeholders to further minimise impacts.

Further consultation undertaken with the FCNSW has identified additional opportunities to further avoid and minimise impacts to State forests through amendments to the project design which have been summarised in the Amendment Report. These include:

- removal of the laydown areas included in the EIS in Corrabare State Forest due to Aboriginal heritage finds identified as part of the Aboriginal Cultural Heritage Assessment
- removal of the laydown area Wollombi Forest Road (south of Halls Road) in the State Forest of the Watagan Mountains due to the area being located within a forestry plantation
- changes to access tracks through consultation with Forestry Corporation of NSW to further avoid impacts to biodiversity
- removal of the stringing site in Olney State Forest to avoid and minimise impacts to the Littlejohn's Tree Frog.

EnergyCo acknowledges that some residual impacts to the recreational value of State forests would remain. To address residual impacts:

- mitigation measure LP4 requires consultation with the FCNSW on construction methodologies and activities as part of continued design development, and prior to and during construction activities to minimise impacts to State forests and State Forest operations (including recreational uses)
- mitigation measure TT8 requires ongoing consultation with local bicycle groups where available and with FCNSW for walking and biking trails in State forests (refer to *Appendix D (Updated mitigation measures)* of the Amendment Report).

5.10 Agriculture

5.10.1 General impacts to agricultural land and practices

Submitter ID numbers

S-92343210, S-94697206, S-95091723, S-95096715, S-95096724, S-95097206, S-95114481, S-95114486, S-95114492, S-95114715, S-95114723, S-95116720, S-95117720, S-95118708, S-95119958, S-95119961, S-95121456, S-95108971

Summary of issues

Submitters raised concerns about the impacts to agricultural land and practices as a result of the construction and/or operation of the project, specifically:

- loss of food and fibre production
- restrictions on the management / movement of stock and other farm operations during construction, including movement of cattle across Broken Back Road
- safety concerns for animals and farm workers, including from EMF and security risks during operation
- biosecurity risks from project vehicle movements between sites increasing spread of weeds, pests and disease during construction
- impacts on shade, micro-climates, stock water and irrigation.

Response

An agricultural impact assessment was prepared for the project, to support the EIS and was included as *Technical Report 5 – Agricultural impact assessment* and summarised in *Chapter 13 (Agriculture)* of the EIS. EnergyCo acknowledges concerns made with respect to general impacts to agriculture associated with construction and operation of the HTP. During project development, the HTP corridor was chosen to avoid impacts to sensitive land uses including agriculture enterprises, biophysical strategic agricultural land (BSAL) and vineyards.

Based on consultation with directly impacted landowners, agricultural lease holders and stakeholders following exhibition of the EIS, the HTP corridor has been diverted further south from the Hunter River to further avoid impacts to high value agricultural land. The following conclusions from the Amendment Report are noted (see *section 5.7, Chapter 5 (Assessment of impacts)* in the Amendment Report):

- construction activities would temporarily remove 38 hectares of irrigated farmland (compared to 57 hectares during construction as noted for the exhibited project in the EIS)
- around 190 hectares of BSAL, representing eight per cent of the project impact area, is now located within the amended project impact area (compared to 213 hectares, or nine per cent of the project impact area in the EIS)
- around 160 hectares of high capability agricultural land is now located in the project impact area (compared to 182 hectares in the exhibited EIS)
- impacts to agricultural productivity because of the establishment of permanent infrastructure was estimated at around \$107,843 per annum, this represents around 0.04 per cent of the gross value of agriculture in the wider region

- temporary disturbance of agricultural land during construction is estimated to impact agricultural productivity at around \$352,252 per annum, representing around 0.1 per cent of the gross value of agricultural land in the wider region (compared to \$404,738 per annum or 0.1 per cent as noted in the EIS).

The impact of the HTP on food and fibre production is considered to be negligible in the context of agriculture in the wider region. Following construction, disturbed areas will be appropriately reinstated to their previous condition and use as soon as feasible and reasonable following the completion of construction (mitigation measure AG2).

As outlined in *section 13.1.3* of the EIS the assessment of agricultural impacts was informed by landowner interviews to obtain information on the agricultural enterprises at properties throughout the project impact area to inform the assessment and mitigation of impacts.

As per mitigation measure AG1 ongoing consultation will be carried out with impacted agricultural landowners and lease holders to understand impacts to agricultural operations, and to inform the support to be provided to the landowners. Support provided will include the development of alternative irrigation strategies where current irrigation activities are inhibited and coordination of traffic control activities on adjacent roads to avoid spraying periods.

Mitigation measure LP2 proposes that property management plans will be implemented for impacted landowners to address landowner concerns about the impacts of construction activities including biosecurity risks for individual properties. Property management plans would include measures to minimise disruption to agricultural operations during construction informed by consultation with landowners to understand agricultural activities and requirements at individual properties.

Impacts to shade and microclimates are acknowledged, noting that the removal of tall vegetation in the easement would diminish the availability of shade and shelter for livestock. In some instances, replacement shade and shelter vegetation may need to be established, or grazing management may need to be modified to allow sufficient shade for certain agricultural activities (e.g. lambing). These requirements will be identified and managed through the development of property management plans. Moreover, as per mitigation measure AG2, disturbed areas will be stabilised and appropriately reinstated to their previous condition and use as soon as feasible and reasonable following the completion of construction. This will be carried out in consultation with the relevant landowner. Impacts to surface (including stock) waters are discussed in *section 5.1.4* of this Submissions Report.

Impacts to restrictions on the management/movement of livestock are detailed in *section 13.3.3* of the EIS. The assessment concluded that, while some movement would be affected temporarily due to restricted access to the construction impact area, these impacts would generally be short in duration, localised, and would be undertaken in consultation with relevant landowners. Any potential restrictions to the movement of livestock or other agricultural operations across Broken Back Road from construction activities would be managed in accordance with a specific property management plan developed in consultation with affected landowners.

Biosecurity risks associated with the movement of construction vehicles, earthwork, and routine maintenance activities during construction and operation of the HTP are detailed in *section 13.3.5* and *section 13.4.4* of the EIS, respectively. The biosecurity risks would generally be highest during construction associated with the greater frequency of earthworks and machinery, vehicle, and

personnel movements. As detailed in *Appendix D (Updated mitigation measures)* of the Amendment Report, mitigation measure AG3 involves the preparation of biosecurity management plan in consultation with landowners and relevant local council biosecurity officers in relation to the distribution of important weeds, the location of high biosecurity risk areas, and property-specific biosecurity risks and controls.

Safety concerns to farm personnel and animals associated with potentially noisy construction activities and vehicle movements during construction and operation of the HTP are acknowledged. Safety concerns associated with construction activities for farm personnel and stock wellbeing will be managed in accordance with property management plans developed in consultation with affected landowners. This will include measures to sequence noise intensive activities around sensitive periods of the livestock production cycle (e.g. lambing or calving) or the need for the movement of livestock away from potential stressors created during construction activities.

The EMF assessment (*Technical Report 17 – Electric and magnetic fields assessment*) reviewed published research on animal health and productivity near transmission infrastructure. Studies undertaken in the United States and Europe have found no evidence that EMF at levels comparable to those predicted for the project, affect the health, reproduction, or behaviour of livestock.

5.10.2 Impacts to vineyards

Submitter ID numbers

S-94697206, S-95028957, S-95096061

Summary of issues

Submitters raised concerns regarding the impacts to vineyards from the project, particularly those near Pokolbin Mountains Road. Specific concerns included impacts as a result of:

- biosecurity risks from construction vehicle movements spreading Phylloxera and other pests and diseases through the Hunter Vineyards District
- increased dust settling on grapevines
- potential restrictions to local vineyards spray patterns if construction or traffic control is next to a vineyard, which may impact grape growth and risk of disease and pests.

Response

As noted in *section 5.10.1* of this Submissions Report, the HTP corridor was selected to minimise impacts to sensitive land uses including agriculture enterprises, biophysical strategic agricultural land (BSAL) and vineyards.

Biosecurity risks and assessment of impacts associated with the movement of construction vehicles, earthwork, and routine maintenance activities during construction of the HTP are detailed in *section 13.3.5, Chapter 13 (Agriculture)* of the EIS. As noted in *section 5.10.1* of this Submissions Report, a biosecurity management plan will be implemented during construction. This plan will be prepared in consultation with landowners and relevant local council biosecurity officers in relation the location of high biosecurity risk areas (refer to mitigation measure AG3). Mitigation measure AG3 has been amended (see *Appendix D (Updated mitigation measures)* of the Amendment Report) to include the management of biosecurity risks to vineyards, which will include specific controls

applicable to vineyards where construction vehicle movements are nearby, as well as monitoring of the effectiveness of these controls.

Property-specific biodiversity risks and concerns, such as the spread of Phylloxera and other pests and diseases through the Hunter Vineyards District and Pokolbin Mountains Road, are acknowledged and will be integrated into the biosecurity management plan as required.

Dust generation will be managed in accordance with proposed mitigation measure AQ2 which includes measures to minimise dust generation and impacts to the community, which would be applied along Pokolbin Mountains Road. Additionally, mitigation measure AQ5 has been introduced (see *Appendix D (Updated mitigation measures)* of the Amendment Report) to specifically address dust generation near vineyards to outline management measures to prevent or minimise dust generation and impacts on vineyards from adjacent road upgrades and construction vehicle movements.

This measure includes but is limited to:

- appropriate communications will be developed before construction and earthwork activities start to notify the potentially impacted residences of the project (including the duration and types of works) and relevant contact details for complaints reporting
- a complaints register will be maintained through construction which will include any complaints related to dust
- any exceptional incidents that cause dust and/or air emissions, either on or off site, and the action taken to resolve the situation will be recorded in the register
- shade cloth barriers with site fencing around vineyard fence borders close to potentially dusty activities
- a water cart or sprays will be deployed to keep exposed areas and soil stockpiles moist, where necessary and practical
- engines will not be left running at idle where possible
- working practices will be modified by limiting activity during periods of adverse weather (hot, dry and windy conditions) and when dust is seen leaving the site
- vehicle loads entering and leaving the project impact area with potentially dusty loads will be covered to prevent escape of materials during transport.

EnergyCo acknowledges that road upgrades to Pokolbin Mountains Road may have an impact on agricultural spraying operations for vineyards which carry an associated risk to agricultural productivity. Potential restrictions to spraying activities for vineyards on Pokolbin Mountains Road will be managed in accordance with proposed mitigation measure AG1 (see *Appendix D (Updated mitigation measures)* of the Amendment Report).

Ongoing consultation will be carried out with vineyards to better understand impacts to operations and to inform the support to be provided to the landowners.

5.10.3 Management and mitigation

Submitter ID numbers

S-94697206, S-95096061, S-95096715

Summary of issues

Submitters commented on the measures detailed in the EIS to mitigate and/or manage the impacts on agriculture, including the provision for:

- measures to manage risks associated with access through agricultural properties such as worker awareness and training, property gating and fencing, signage, surveillance (security camera) and traffic control measures
- biosecurity measures including cleaning of vehicles, weed and feral animal control and other biosecurity protocols or strategies to protect vineyards from biosecurity risks
- compensation for any loss of pasture, crop yield and water contamination as a result of incidents associated with the transmission line.

Response

As noted in *section 5.10.1* of this Submissions Report, biosecurity risks for agricultural enterprises, including vineyards, will be managed in accordance with the biosecurity management plan (mitigation measure AG3) developed in consultation with affected landowners and agricultural lease holders. Mitigation measure AG3 has been amended to include the management of biosecurity risks to vineyards, which will include specific controls applicable to vineyards where construction vehicle movements are nearby, as well as monitoring of the effectiveness of these controls.

EnergyCo acknowledges concern regarding construction access through agricultural areas, where access is required through agricultural properties during construction of the HTP. This includes additional risks associated with the movement of construction vehicles on local roads frequented by farming machinery or the movement of livestock. Individual property management plans will be developed in consultation with affected landowners, to address property-specific risks and concerns such as those associated with security, access to agricultural property during construction of the project, traffic control, as well worker awareness and training. Mitigation measure TT1 outlines the preparation of a traffic management plan which will be prepared to manage the potential traffic and transport impacts of the project as per *Appendix D (Updated mitigation measures)* of the Amendment Report.

The property management plans will include measures to minimise disruption to agricultural practices during construction, including the identification of any required adjustments to existing agricultural activities including adjustments to fencing or access tracks or adjustments to grazing or cropping activities because of the location of permanent infrastructure within agricultural land. This would be informed by ongoing consultation with landowners (refer to mitigation measure LP2). Furthermore, disturbed areas will be stabilised and appropriately reinstated to their previous condition and use as soon as feasible and reasonable following the completion of construction activities. Permanent impacts to agricultural operations are included in the compensation calculations under the *NSW Land Acquisition (Just Terms Compensation) Act 1991*.

5.11 Social

5.11.1 Impact assessment approach

Submitter ID numbers

S-92240456, S-94320457, S-95105488

Summary of issues

Submitters commented on the approach to the social impact assessment. This included:

- the social impact assessment for the community impacted along Pokolbin Mountains Road was inadequate as it lacked detail on the concerns raised and did not acknowledge the meetings EnergyCo held with the Pokolbin Mountains Road Residents, Landholders and Users Group in June, July, September and October 2025, or the full extent of the matters discussed
- the statements about the unknown level of concern and the positive impact outcome in the Social impact assessment Worksheet for 'Economic benefits for neighbours who will experience visual amenity impacts' did not reflect the community's input.

Response

A social impact assessment was prepared to support the EIS for the project and was included as *Technical Report 6 – Social impact assessment* and summarised in *Chapter 14 (Social)* of the EIS.

Section 4.2.1 of Technical Report 6 – Social impact assessment specifically mentions the meeting held with Pokolbin Mountains Road Residents, Landholders and Users Group in December 2024 undertaken to support the SIA exclusively. *Table 4.5 of Technical Report 6 – Social impact assessment* provides a summary of the key feedback received from stakeholders on Pokolbin Mountains Road that informed the assessment of potential social impacts related to the use of Pokolbin Mountains Road. The assessment also took into account more general feedback from stakeholder engagement activities, carried out during preparation of the EIS up to July 2025 as documented in *Appendix D (Community engagement outcomes)* of the EIS.

Since this time, it is acknowledged that additional meetings have been held with Pokolbin Mountains Road Residents, Landholders and User groups that have informed this Submissions Report and the Amendment Report for the project. *Section 6.23* of this Submissions Report provides a summary of how the primary concerns raised by the Pokolbin Mountains Road Residents, Landholders and Users Group have been addressed across the various aspects of the EIS and project.

Appendix D – Social impact assessment Worksheet (appended to the Scoping Report for the project) was prepared as a preliminary scoping tool to inform the future preparation of the social impact assessment for the EIS and does not constitute a final assessment. As explained in *section 3.3.1 of Technical Report 6 – Social impact assessment*, this preliminary assessment was further refined during the EIS process based on the outcomes of further engagement, related technical reports and further project details. *Section 6.5.6 Impacts on tourism operation and visitor economy* and *section 7.3.1 Changes to the natural character of landscape altering sense of place* in *Technical Report 6 – Social impact assessment* acknowledged potential negative impacts related to visual amenity changes from the project and was informed by engagement.

5.11.2 Impacts on health and wellbeing and decision making

Submitter ID numbers

S-92343210, S-92697462, S-93336707, S-93943712, S-94320457, S-94410706, S-94697206, S-94818719, S-94946207, S-94952721, S-94965456, S-94967706, S-94995477, S-95106969, S-95108231, S-95114715, S-95114723

Summary of issues

Submitters commented on the potential impacts on health, wellbeing and decision making. This was largely associated with mental health impacts from the property acquisition process, impacts on environmental values and perceived safety risks associated with the project. Specific concerns included:

- stress and perceived hardship from potential compulsory acquisition if landowners do not negotiate an agreement and feeling as though they have a lack of power in the process
- impacts on mental health including stress, disappointment and angst relating to project decisions that landowners and the community do not feel they have control or influence over and may affect their property or businesses
- treatment of vulnerable and elderly people during property acquisition processes
- a perceived unfair offer for a property lease as it was based on property value alone and does not consider personal, rural lifestyle or environmental impacts
- loss of flora and fauna for future generations resulting in emotional distress for people who place significant importance on environmental values
- perception that communities and wildlife care sanctuaries that have spent time and money caring for injured animals and protecting ecosystems have been ignored
- a potential increase in crime, dumping, vandalism and unauthorised access
- community safety concerns associated with increased hazards and risks from transmission infrastructure, including concern about structural failure due to extreme weather events and increased bushfire risk
- safety risks for Millfield Public School students due to the increase in heavy vehicles passing the school during construction.

Response

Mental health impacts from property acquisition processes

EnergyCo acknowledges that transmission projects, along with the associated processes for property acquisition and easement negotiations, can be challenging for landowners and may have emotional and mental health impacts. *Section 6.6.1 of Technical Report 6 – Social impact assessment* of the EIS recognises the stress and anxiety that can result from the project and has assessed the unmitigated impact on mental health and wellbeing for directly affected landowners as high (negative). The impacts are expected to be reduced to medium (negative) with mitigation measures in place including implementation of a landowner engagement strategy (mitigation measure S04) for the project. This landowner engagement strategy requires all land and property access and community engagement personnel to be trained in community & stakeholder engagement aligned with trauma-informed care principles to support interactions with vulnerable individuals, including those with chronic illness, disability or mental health conditions. A phone line service (the Property

Acquisition Support Line) is also available to property owners, their families, business owners, and employees directly affected by property acquisition, providing free access to a qualified psychologist or social worker 24 hours a day, seven days a week.

Technical Report 6 – Social impact assessment of the EIS and Appendix I (Social impact assessment addendum) of the Amendment Report recognises the stress and anxiety that can result from partial or full land acquisitions and changes to transmission routes, which impact additional landowners. EnergyCo has sought to engage with affected landowners as early as possible to provide clear, transparent information about the decision-making and land acquisition processes. *Section 5.4.2* of this Submissions Report provides discussion on how feedback from the community and landowners during project development has shaped and refined the project. This early engagement aimed to minimise uncertainty, reduce stress, and ensure that landowners can discuss their concerns, understand their options, and access appropriate support throughout the process.

In NSW, land acquisition is governed by the *Land Acquisition (Just Terms Compensation) Act 1991*, which outlines the process and determines how compensation is calculated. EnergyCo appoints independent valuers to quantify the compensation based on the land it wishes to use for the project based on *Section 55* of the *Land Acquisition (Just Terms Compensation) Act 1991*.

Where the project crosses private property, EnergyCo's priority is to work directly with the landowners to negotiate an easement. Compulsory acquisition is a legal process that enables EnergyCo to acquire interests in land when the acquisition process is unable to be completed by agreement with a landowner. Compulsory acquisition is only used as a last resort to ensure critical infrastructure projects that benefit NSW communities can proceed on schedule. Under *clause 10A* of the *Land Acquisition (Just Terms Compensation) Act 1991*, EnergyCo is required to make a genuine attempt to acquire the land by agreement for at least 6 months before giving a proposed acquisition notice. After the notice is provided, EnergyCo will still continue to seek to achieve a negotiated agreement within 90 days to avoid the need for compulsory acquisition.

Every potentially affected landowner has a dedicated Land Acquisition Manager available to meet, provide information, and offer ongoing support. EnergyCo uses two valuations (one obtained by EnergyCo and the other obtained by the landowner), conducted by qualified professional valuers to help identify a fair compensation amount through negotiation. Compensation is based on market value and includes reimbursement of reasonable legal and valuation fees. Once construction is complete and the project is operational, additional payment in the form of Strategic Benefits Payments would be made to landowners where relevant in annual instalments over 20 years.

Impacts on environmental values

EnergyCo recognises that the Hunter region's natural environment, valued for its aesthetic appeal and wellbeing benefits, is a defining part of its identity, cherished by locals and visitors alike. The loss of flora and fauna can cause solastalgia, a term used to describe the emotional distress caused by negative changes in one's home environment. A range of psychological effects, such as loss of sense of place, grief and sadness, can occur (Albrecht 2019). *Section 6.6.2* of *Technical Report 6 – Social impact assessment* assesses the social impacts related to impacts on environmental values prior to mitigation as high (negative) and with mitigation as medium (negative). As discussed in *section 5.1.2* of this Submissions Report, EnergyCo has and will continue to seek to avoid and minimise the project's impacts on areas of environmental value, including through refinements to the project. As discussed in *section 6.1.6* of *Appendix I (Social impact assessment addendum)* of the

Amendment Report, the amended project is expected to have slightly less impact on biodiversity values. This is due to project amendments protecting the habitat of the endangered Littlejohn's Tree Frog and minimising impacts on threatened ecological communities. However, this would not result in a change to the impact rating as high (negative) without mitigation.

EnergyCo recognises the significant time, effort, and funding invested in establishing wildlife care sanctuaries, as well as the vital role they play in caring for injured animals. This includes the bespoke soft wallaby release facility located in the corridor social locality that would be impacted by the project. *Appendix D (Updated mitigation measures)* of the Amendment Report includes a new mitigation measure S08 that requires EnergyCo to investigate opportunities to assist wildlife carers and organisations with the relocation of directly affected wildlife care and soft release pen facilities and respond to increase demand in wildlife care services from construction of the project.

Perceived safety risks from the project

EnergyCo acknowledges the community safety concerns regarding structural failure due to extreme weather, increased bushfire risk and anti-social behaviour during construction that may cause anxiety and stress to landowners and nearby neighbours. *Section 7.2.1 of Technical Report 6 – Social impact assessment* assessed the potential for safety and wellbeing concerns related to electromagnetic fields, bushfire hazards and increased anti-social behaviour associated with the project (including potential unauthorised access to restricted areas for activities such as 4WD and trail bike riding, parties, camping, and other prohibited uses). The assessment considered the findings of *Technical Report 14 – Bushfire risk assessment*, which found that the likelihood of 500 kV transmission lines initiating bushfires is very low, which reflects infrastructure design features such as high clearance heights, anti-clash conductors, and robust maintenance systems that meet critical electricity standards. Overall, social impacts from safety and wellbeing concerns related to electromagnetic fields, bushfire hazards and anti-social behaviours were assessed as medium (negative) prior to mitigation. The significance of the impact is expected to be reduced to low (negative) with implementation of mitigation measures including (refer to *Appendix D (Updated mitigation measures)* of the Amendment Report):

- mitigation measure S07, which requires a code of conduct for workers in the temporary worker accommodation management plan(s) that would include a zero-tolerance policy for anti-social behaviour
- mitigation measure S02, which requires the implementation of a community communication strategy to provide clear, accessible information on fire safety and associated risk reduction measures to address community concerns
- mitigation measure BF1, which requires a bushfire emergency management and evacuation plan to be prepared to address the requirements of NSW Rural Fire Service and implemented.

The risk of anti-social behaviour would also be minimised through fitting transmission towers with anti-climbing barriers and installing locked gates, fencing, lighting, cameras and signage as required across the project to manage access and maintain security.

EnergyCo acknowledges that heavy and light vehicle traffic from construction activities and workers on site may impact perceptions of safety for children during pick-up and drop-off times. *Section 6.6.3 of Technical Report 6 – Social impact assessment* provides an assessment of the impact of changes to traffic movements potentially creating new road safety risks, including in relation to school zones and residential areas where increased vehicle movements could intersect with

vulnerable road users such as children. The assessment concluded that the impact significance of these potential road safety risks would be high (negative) without mitigation and reduced to medium (negative) with mitigation. A traffic management plan will be implemented for construction of the project, which will identify requirements for minimising traffic impacts and measures required to ensure the safety of children during school hours. The traffic management plan will be developed in consultation with the relevant road/rail authorities and form part of the construction environmental management plan (CEMP).

Considering stakeholder feedback and the inclusion of worker accommodation at the Millfield construction support site, additional consultation with Millfield Public School has been carried out to inform preparation of *Appendix J (Social impact assessment addendum)* of the Amendment Report. During stakeholder consultation, Millfield Public School raised road safety concerns for school-aged children due to the perceived increase in construction vehicles passing the school, particularly at school pick-up and drop-off times, associated with project amendment to include workforce accommodation at the Wollombi Road construction support site. However, the amended project would result in no change in the assessed impact rating compared to *Technical Report 6 – Social impact assessment* as the overall number of traffic movements would only be slightly increased from the exhibited project. Regardless, *Appendix D (Updated mitigation measures)* of the Amendment Report has included an additional mitigation measure S09 to address the perceived change in safety risk from construction vehicles in proximity to Millfield Public School.

5.11.3 Impacts on surroundings

Submitter ID numbers

S-92240456, S-92686707, S-94193709, S-94410706, S-94818719, S-94879975, S-94946207, S-94952721, S-94958737, S-94965456, S-94995477, S-95004721, S-95012245, S-95028957, S-95090232, S-95108231

Summary of issues

Submitters commented on the impact of the project on surroundings, particularly in relation to the loss of amenity as a result of the project. Comments included the concern that the project would result in:

- reduced amenity within State forests and other locations (such as Pokolbin Mountain lookout) that are valued for recreational activities including bushwalks, cycling, camping and picnics and nature-based tourism
- reduced amenity for local communities (particularly Millfield) and changes to the quiet rural character of the Hunter Valley as a result of construction traffic, noise and dust as well as noise and visual changes from the new transmission lines during operation
- reduced amenity for local tourism assets that rely on scenic views, such as cellar doors and boutique accommodation near Pokolbin Mountains Road and Mount View Road.

Response

EnergyCo acknowledges that the project may impact surroundings and reduce amenity within State forests, including impacts on hiking, camping, and other nature-based recreation, as well as in residential areas and local tourism destinations near work sites and worker accommodation facilities. These impacts may arise from increased noise, dust, vibration, visual changes, and concern for loss of privacy for nearby residents. While there would be amenity impacts during construction, these impacts would be temporary and would be transient across the project impact area except near the construction support sites where impacts may occur for a longer duration.

Technical Report 6 - Social impact assessment in the EIS highlighted stakeholder concerns about visual impacts and changes to the natural and rural landscape. The project's potential effect on visual and landscape changes, and for enterprises dependent on land use versatility or visual amenity (e.g. nearby vineyards, equestrian centres, eco-tourism businesses), is addressed in *Chapters 6 and 7 of Technical Report 6 - Social impact assessment* as follows:

- section 6.5.6 assessed the impacts on the tourism operation and visitor economy from changes in amenity during construction and concluded that the impact without mitigation would be medium (negative) for tourism operators in the surrounding local social localities, which would be reduced to low (negative) with consideration of mitigation measures. The mitigated rating was revised to negligible in *Appendix I (Social impact assessment addendum)* of the Amendment Report due to the new social impact assessment guideline rather than the amendments
- section 7.3.1 assessed the long-term impact of changes to the nature of landscape altering sense of place and concluded that without mitigation, the potential impact would be high (negative) for the corridor and local social localities, which would be reduced to medium (negative) for the corridor and low (negative) for the local and regional social localities with consideration of mitigation.

EnergyCo will minimise temporary impacts on the access to recreational and tourism areas during construction through the implementation of the social impact management plan (mitigation measure S01), community communication strategy (mitigation measure S02) and implementation of visual, traffic and noise mitigation measures near key visitor attractions (refer to *Appendix D (Updated mitigation measures)* of the Amendment Report).

5.11.4 Impacts on accessibility and livelihoods

Submitter ID numbers

S-92240456, S-94045957, S-94320457, S-94513963, S-94668226, S-94673957, S-94697206, S-94770457, S-94958737, S-95004721, S-95013210, S-95016475, S-95028957, S-95095706, S-95104707

Summary of issues

Submitters raised concerns about the impacts on accessibility and livelihoods as a result of the project. Specific concerns included:

- impacts on accessibility and livelihoods during construction as a result of road works, traffic management controls and/or road closures where properties or businesses have limited or no alternative routes. Examples include properties accessed from Pokolbin Mountains Road, Broken Back Road, Mount View Road and Watagan Road. This disruption to access may lead to:
 - less customers and reduced success of local businesses including boutique accommodation, farming and wineries, resulting in loss of income impacting on people's financial situation
 - delays for local residents to access schools, work, groceries, healthcare, aged care support, postal deliveries and recreational infrastructure
 - deterring visitors from engaging in tourism businesses including wineries and eco-tourism in Pokolbin
 - reduced access to recreational and cultural experiences in Pokolbin State Forest, Pokolbin Lookout and Watagan National Park, including for recreational users such as 4WDs, trail and mountain bikers, walkers, runners, campers and other sightseers
 - reduced access and delays for emergency services to respond to incidents for residents as well as during bushfires and accidents in forests and national parks
- impacts to the viability of the Hunter Valley Gliding Club and the Vintage Gliders Australia regatta given the potential aviation risks posed by the transmission line and towers, which may result in a reduction of gliding activities at the Warkworth aerodrome, with loss of associated social and economic benefits that gliding activity contributes to the region.

Response

EnergyCo acknowledges that construction activities, including roadworks, traffic management controls, and road closures, may impact how people move around and access local businesses, social infrastructure, open spaces, and emergency services. It is acknowledged that temporary accessibility impacts from construction activities could also impact the livelihoods of stakeholders, including local business owners across various industries that operate within the social locality.

Section 6.4.4 of Technical Report 6 – Social impact assessment in the EIS examines the social impacts associated with changes in access to recreational infrastructure resulting from road network modifications for various recreational user groups. This considers how minor delays, perceived safety risks, reduced amenity of the natural surroundings or uncertainty about access could deter residents and visitors from accessing their preferred recreational sites. That assessment concluded that impacts associated with Accessibility (changed access to recreational infrastructure due to road network changes) would be high (negative) in the corridor locality without mitigation (which is unchanged in the addendum assessment in *Appendix I (Social impact assessment addendum)* of the Amendment Report. These impacts would be managed through mitigation measures including TT1 (traffic management plan), S01 (social impact management plan), and S02 (community communication strategy) (refer to *Appendix D (Updated mitigation measures)* of the Amendment Report). *Appendix H (Revised traffic and transport impact assessment)* of the Amendment Report also includes a new mitigation measure TT14 that requires a property access sub-plan to be prepared for

Pokolbin Mountains Road, parts of Mount View Road and Mount Baker Road to manage property access impacts during construction.

Section 6.5.6 of *Technical Report 6 – Social impact assessment* also considers how increased construction noise, visual disturbances and congestion may deter visitors from engaging in wine tourism, eco-tourism, and cultural heritage experiences, impacting on tourism operation and the visitor economy. The assessment concluded that the pre-mitigated impact rating would be medium (negative) for tourism operators in the surrounding local social localities. The project would minimise impacts on the tourism sector through the implementation of the social impact management plan (mitigation measure S01) and community communication strategy (mitigation measure S02). These require engagement with tourism and recreation operators and Hunter businesses (including wineries) to manage associated impacts during construction, and community notification processes that will be developed in consultation with FCNSW and local councils. The implementation of visual, traffic and noise mitigation measures near key visitor attractions (refer to *Appendix D (Updated mitigation measures)* of the Amendment Report) would also assist in minimising impacts.

As discussed in section 6.11.3 of this Submissions Report, EnergyCo acknowledges the concerns raised regarding the potential impact of the project on the ongoing viability of Hunter Valley Gliding Club, including the potential for both actual and perceived increases in risk to affect membership and future use including for the Vintage Gliders Australia Regatta. *Technical Report 16 – Aviation impact assessment* considered the risks and impacts the HTP would have on the uncertified Warkworth Aerodrome and found that no adverse impacts would occur if mitigation measures were implemented. EnergyCo recognises that club viability depends not only on technical safety but also on the confidence of members, visiting pilots, and the broader aviation community. In support of the ongoing viability of the Hunter Valley Gliding Club and the safe, continued operation of the Warkworth Aerodrome, EnergyCo in coordination with Hunter Valley Gliding Club have supported a risk assessment to provide information to the club on how it can update the club's safety management system to ensure the continuity of their operations.

5.11.5 Impacts on community

Submitter ID numbers

S-92240456, S-93336707, S-93943712, S-94818719, S-94946207, S-94965781, S-94995477, S95096061, S95108231

Summary of issues

Submitters commented on the impacts on the community by the project, which was largely associated with the concern about the unequal distribution of benefits and impacts from the project and perceived risks to community cohesion and safety. Comments included:

- increased burden and strain on community and council resources (including roads) from the worker accommodation, construction compounds and construction access routes, particularly in the Millfield and Mount View Road area
- perceived continuation of a pattern of underinvestment and failure to value Pokolbin Mountains Road, which impacts on the surrounding local community

- perception that landowners bear the costs and impacts of the project, while the government and metropolitan energy users benefit from the project without contributing to ongoing maintenance of roads
- potential risk of fragmentation of rural communities from the project
- perceived community safety risks from an influx of construction workers associated with worker accommodation and construction sites on Wollombi Road and Mount View Road
- potential impacts to the growth of Millfield, which has been identified by Cessnock Council as a growth area and has new subdivisions, as the impacts of the project may deter new residents and businesses, which in turn would impact the ability to attract new services.

Response

EnergyCo recognises the community's concerns regarding unequal distribution of project benefits, and the potential risks to cohesion and safety, particularly due to worker accommodation, construction activity, and increased heavy vehicle movement in areas like Millfield, Mount View Road, and Pokolbin Mountains Road.

Perceived unequal distribution of benefits and impacts from the project creating community strain

Section 6.3.3 of *Technical Report 6 – Social impact assessment* and section 6.1.3.3 of *Appendix I (Social impact assessment addendum)* of the Amendment Report provides an assessment of the perceived unequal distribution of project benefits creating community strain, whereby directly impacted stakeholders (e.g. landowners) were perceived as bearing disproportionate impacts without receiving clear, tangible benefits for their community. The significance of this impact prior to mitigation is assessed as medium (negative) in the corridor and local social localities. This impact would be minimised for directly affected landowners through provision of compensation via the *Land Acquisition (Just Terms Compensation) Act 1991*, implementing the Strategic Benefit Payments, and a community communication strategy as per mitigation measure S02. *Appendix H (Revised traffic and transport impact assessment)* of the Amendment Report outlines mitigation measures to address community concerns relating to strain on roads including a requirement for pre-construction road dilapidation surveys and routine inspections (mitigation measure TT6).

Employment and procurement benefits for local communities would be enhanced through implementation of a local business and employment strategy (mitigation measure S05) and an industry and Aboriginal participation plan (mitigation measure S06). EnergyCo is expecting to commence consultation with relevant communities in 2026 to inform the design and delivery of the community and employment benefit program in the Hunter-Central Coast region that will ensure benefits are shared with the local communities hosting the renewable energy transition, including those hosting the project.

Workforce presence affecting perceptions of safety and community cohesion

Section 6.3.1 of *Technical Report 6 – Social impact assessment* provides an assessment of the impact of workforce presence affecting perceptions of safety and community cohesion, with particular reference to the construction support sites. Analysis of the likely effects and extent/magnitude of impacts within the corridor social locality and social localities affected by construction support sites concludes that the significance of impacts to cohesion and perceptions of safety prior to mitigation is assessed as medium (negative).

Appendix I (Social impact assessment addendum) of the Amendment Report identified that the reconfiguration of the Wollombi Road construction support site would increase workforce presence in nearby towns, particularly outside of construction work hours, which may increase the perception of potential safety and community cohesion impacts, particularly from the perspective of Millfield Public School. The assessment acknowledges the concerns raised regarding the impact of growth areas along the corridor and local social localities, including Millfield. The removal of worker accommodation at the Gouldsville Road construction support site is expected to reduce workforce presence in the surrounding towns, thereby reducing the potential for community concern about the influx of workers and its effects on community cohesion and function, as well as increased demand for services and accommodation. However, the assessment concluded that while perceptions of potential impacts may have increased or decreased for certain stakeholders, the changes are minor compared to the exhibited project and therefore there would be no changes to the overall impact rating from *Technical Report 6 – Social impact assessment*.

These impacts would be managed through implementation of temporary worker accommodation management plan(s) as per mitigation measure S07, which would be informed by consultation with neighbours, councils, health and emergency service stakeholders and will include specific measures to support community cohesion and safety at nearby communities.

5.11.6 Impacts on way of life and culture

Submitter ID numbers

S-92766206, S-94697206, S-94879975, S-94956774, S-94965494, S-94995477, S-95004721

Summary of issues

Submitters commented on the impacts to the way of life and culture, which was largely associated with connection to land and rural culture impacts. This included:

- impacts to land that people feel strong connections to including:
 - sacred areas of ancestors
 - Pokolbin State Forest that holds significant social and cultural value for local people who regularly explore and connect with nature
 - residential properties that they feel a strong sense of belonging to, including families that have lived on Pokolbin Mountains Road for several generations
- concern that the project may threaten the rural way of life that is valued by local residents and communities due to disruption during construction and/or the long-term loss of amenity during operation of the project.

Response

The project traverses a region of significant cultural value to Wonnarua, Awabakal, and Darkinjung peoples, intersecting known Aboriginal heritage places and affecting broader cultural landscapes. As discussed in *section 3.6.2, Chapter 3 (Alternatives and options)* of the EIS, since initial discussions with Traditional Owners in late 2023, refinements to the transmission line alignment have been made to avoid/minimise impacts to culturally significant Aboriginal sites and locations, both tangible and intangible, wherever feasible. Despite this, it is acknowledged that the loss of cultural heritage

values cannot be entirely avoided. *Technical Report 2 – Aboriginal cultural heritage assessment* and *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report provides discussion on the potential impacts of the project and amended project on Aboriginal heritage and the proposed management approach.

Section 6.7.1 of *Technical Report 6 – Social impact assessment* of the EIS assessed potential impacts to Aboriginal cultural heritage, cultural landscapes and wellbeing from the project. During engagement for both the social impact assessment and the Aboriginal cultural heritage assessment, participants raised concerns about the potential for irreversible harm to tangible and intangible cultural heritage, and its implications for cultural identity, wellbeing, and intergenerational connection from the project. The significance of this impact before mitigation is assessed as high (negative) for the corridor social locality, and Traditional Owners. The impact was assessed as being reduced to low (negative) with implementation of mitigation measures including S01 social impact management plan, S02 community communication strategy and AH04 Aboriginal cultural heritage management plan.

It is acknowledged that local residents may have a strong connection to the Pokolbin State Forest as it has significant community and recreational value. Locals describe these forests as affordable and easily accessible destinations, supporting day trips, camping, 4WD touring, horse riding, hiking, and mountain biking. They are also crucial for family wellbeing, social connection, and community identity. Mitigation measures, such as the traffic management plan (TT1) and community communication strategy (S02), including ongoing engagement with tourism and recreation operators, aim to provide clear communication and minimise any temporary disruptions during the construction phase of the project to support continued access to State forests for people to explore and connect with nature. Once operational, the project is unlikely to noticeably change the way people connect with State forests as access would be retained and views of the new infrastructure would be limited to views from forestry tracks rather than from recreational areas.

Residents who live on Pokolbin Mountains Road also have a strong connection to the land and a sense of belonging, passed down through generations of landowners. EnergyCo has undertaken engagement with these landowners to provide opportunities for their opinions to be heard and incorporated into project planning and will continue engagement to deliver positive outcomes for the community.

Concerns have been acknowledged regarding the project's impact on the rural way of life, which may be affected by construction activities and the longer-term social impact related to the loss of amenity. Responses to matters concerning social impacts related to changes in surroundings are provided in section 5.11.3 of this Submissions Report with responses to impacts to private views provided in section 5.7.4 of this Submissions Report. The potential impacts on rural way of life would be similar to those described and assessed in *Technical Report 6 – Social impact assessment*, such as biosecurity risks to farms, soil erosion, changes in overland flow, and restrictions on farm vehicle and/or stock movements. EnergyCo has committed to a range of mitigation measures to reduce risks to rural livelihoods, including mitigation measures S04 (landowner engagement strategy), LP2 (property management plans) and B1 (biodiversity management plan, inclusive of biosecurity management measures).

5.11.7 Management and mitigation

Submitter ID numbers

S-92611207, S-94320457, S-94770457, S-94780957, S-94876957, S-95016475, S-95028957, S-95073209, S-95105488

Summary of issues

Submitters suggested or commented on the mitigation measures identified in the EIS to address social impacts or to enhance community benefits. The suggestions or queries included:

- the upgrade of roads used by construction vehicles (noting the disruption to business and way of life may be better received) would deliver safety benefits during construction and in the long-term
- any required upgrades or rectification of road damage from the project should be paid for by EnergyCo to minimise the financial burden on Council and ratepayers
- an upgrade of the lower section of Watagan Track to provide a reliable secondary access or exit route for residents, guests, and emergency services, reduce pressure on Pokolbin Mountains Road during construction and deliver a long-term community benefit beyond the construction period
- who the stakeholders are that EnergyCo will work with to mitigate negative social impacts and enhance project benefits. The submitter suggested this should include individuals impacted by traffic
- concern regarding the lack of site-specific mitigation measures for Pokolbin Mountains Road
- ongoing coordination with people who rely on Pokolbin Mountains Road, such as by establishing a Local Access and Tourism Liaison Group with residents, Cessnock City Council, and local businesses, to review traffic management plans, monitor impacts and manage access
- whether consideration was given to constructing worker accommodation so that it could be gifted after construction as permanent housing to address the current housing crisis, benefit the local Aboriginal community or other community programs
- the need for a community and employment benefits program for the project to contribute towards social licence
- that benefit sharing should be aligned with the Benefit Sharing Guideline (DPHI, 2024) to reimburse Cessnock City Council for impacts incurred in their LGA associated with the project
- concern about the lack of detail provided about the community and employment benefits program, which the assessment identifies would mitigate the negative impacts in affected communities. This includes lack of detail on what is proposed, when details will be available and how these will mitigate the impacts
- the properties owned by people who are highly concerned about changes in land use should be acquired.

Response

EnergyCo's engagement with stakeholders as part of EIS, captured in *Technical Report 6 – Social impact assessment* and the Addendum Social impact assessment, has helped identify both the positive and negative social impacts of the project, along with ways to mitigate and enhance these impacts.

EnergyCo has identified the roads that will require upgrades in the EIS and Amendment Report (refer to *section 4A.3.5* of the revised project description (*Appendix A of the Amendment Report*) and *section 5.3.12* of *Appendix H (Revised traffic and transport impact assessment)* of the Amendment Report). EnergyCo has carried out consultation regarding these proposed changes with the relevant roads authority (TfNSW, local councils or FCNSW). These upgrades are designed to manage construction traffic more effectively and reduce safety risks, which would benefit the community. Road upgrades and any rectification work (to make good on damages caused by the project) identified by road dilapidation surveys (as per mitigation measure TT6), are included in project costs, ensuring that costs associated with any required rectification works are not passed on to local councils or ratepayers. Further discussion on the management of impacts on roads is provided in *section 5.8* of this Submissions Report.

Additional mitigation measures have been proposed in the Amendment Report (refer to *Appendix D (Updated mitigation measures)*), including mitigation measure TT14 that requires a property access sub-plan to be prepared for Pokolbin Mountains Road, parts of Mount View Road and Mount Baker Road to manage property access impacts during construction.

EnergyCo recognises the importance of exploring opportunities to create positive housing and economic outcomes for local communities. EnergyCo is involved in ongoing discussions with councils regarding opportunities to provide legacy housing across EnergyCo's portfolio of projects.

EnergyCo is expecting to commence consultation with relevant communities in 2026 to inform the design and delivery of the community and employment benefit program in the Hunter-Central Coast region that will ensure benefits are shared with the local communities hosting the renewable energy transition, including those hosting the HTP. The *Benefit Sharing Guideline* (DPHI, 2024) does not apply to electricity transmission infrastructure as stated in *section 1.2* of the guideline.

The implementation of a local business and employment strategy and an industry and Aboriginal participation plan during detailed design and construction of the project (refer to *Appendix D (Updated mitigation measures)* of the Amendment Report) would enhance the benefits of the project for local communities through enhancing employment and procurement opportunities.

Acquisition of land for the project would directly impact private landowners, including farmers, rural businesses and residential property owners through total or partial property acquisition including easement acquisition. As outlined in *section 6.2.2* of *Technical Report 6 – Social impact assessment* of the EIS, seven private landowners with properties that would be directly impacted by the transmission line corridor or construction support sites requested a whole of property acquisition instead of the creation of an easement or partial acquisition of their land. EnergyCo is progressing discussions with these landowners with an aim to negotiate an agreement.

EnergyCo has also established a range of mental health and wellbeing measures for landowners affected by property access and acquisition processes, including 24/7 psychological services through a Property Acquisition Support Line and access to free and confidential counselling. Every potentially affected landowner has a dedicated personal manager who is available to meet, provide information and offer ongoing support. A landowner engagement strategy will also be implemented during detailed design and construction (refer to *Appendix D (Updated mitigation measures)* of the Amendment Report), which includes specific training requirements for engaging with vulnerable people.

5.12 Historic heritage

5.12.1 General historic heritage impacts

Submitter ID numbers

S-94995477, S-95012245

Summary of issues

Submitters commented on the heritage value and significance of the Oakley Homestead and the town of Millfield and stated that impacts on the homestead and town should be avoided.

Response

A historic heritage assessment was prepared to support the EIS for the project and was included as *Technical Report 7 – Historic heritage impact statement* and summarised in *Chapter 15 (Historic heritage)* of the EIS. A historic heritage assessment addendum was prepared to assess the amended project, (*Appendix J (Historic heritage statement addendum)* of the Amendment Report).

Oakley Estate (SMA internal ID: 170126/170127) is located within the Singleton Military Area (SMA) and the curtilage is partially within the HTP corridor. As the Oakley Estate is located on Commonwealth Land, it has been assessed against the Garrison Estate Management System (GEMS) Heritage Importance Rankings Definitions which determined the Oakley Estate to have a high GEMS significance (Umwelt (Australia) 2021). *Appendix F – Historic Heritage Assessment*, to the *Draft Singleton Military Area Heritage Management Plan* (Umwelt (Australia) 2021) also identified the Oakley Estate has having State heritage significance. The estate is described in *section 4.3.1.6 of Technical Report 7 – Historic heritage impact statement*. The homestead is in a dilapidated state and has low integrity.

As noted in *section 15.3* of the EIS, the construction impact area will intersect the curtilage of Oakley Estate. However, the homestead and areas of archaeological potential would not be directly impacted by the project. The closest element of the project would be the new access tracks which are located around 100 metres from the homestead and visible remains. This is well beyond the safe working distances identified in the EIS with respect to potential vibration impacts that may occur during the construction of the access track. Further, mitigation measure HH2 would manage the impact to the heritage curtilage through the erection of an exclusion barrier prior to construction activities.

The condition and maintenance of the homestead, including ‘making safe’ works to Oakley Estate homestead by Defence (removal of unstable elements) and the removal of asbestos additions to the homestead (based on photographs taken by Iris for *Appendix G (Landscape character and visual impact assessment addendum)* in October 2025) have significantly reduced its value as an item of built heritage. While still an extant structure, the homestead is essentially a ruin. The hayshed has either collapsed or has been demolished, and the only building still standing in any kind of integrity is the garage, which is also in a very dilapidated condition. As such, its values are largely archaeological. While there remains a setting within which the homestead and outbuildings sit, the importance of this has been considerably reduced because the other elements are either no longer standing or are in a severely poor condition, and the more intact values are subsurface

archaeological resources. The current dilapidated and damaged condition of the Oakley Estate homestead and other former outbuildings have resulted in a reduced level of heritage significance, downgraded to local heritage significance at most.

As noted in *section 15.4* of the EIS, the project would have a moderate impact to the site's heritage significance due to the visual impact on Oakley Estate as the transmission line and infrastructure would alter the setting of the heritage site. The primary values of Oakley Estate in its current condition have been reassessed in *Appendix J (Historic heritage impact statement addendum)* of the Amendment Report to be archaeological. While the setting still has some value, it has been significantly reduced by the loss of the homestead and outbuildings.

All areas of known or potential heritage value within the study area were identified and assessed in *Technical Report 7 - Historic heritage impact statement*. One heritage item was identified in Millfield, the Millfield General Cemetery (Item no. I141), however the Millfield town is not considered to have broad heritage significance as defined in the *Burra Charter* (Australia ICOMOS 2013). Refer to *section 3.5.1* of *Technical Report 7 - Historic heritage impact statement* for further information on the NSW Heritage assessment criteria used to assess the heritage significance of a place.

Section 4.3.2.15 of the *Technical Report 7 - Historic heritage impact statement* contains further details on the Millfield General Cemetery, listed on the *Cessnock Local Environmental Plan 2011*. *Appendix J (Historic heritage statement addendum)* of the Amendment Report found the Millfield General Cemetery would not be directly impacted by the project, which is consistent with the EIS. The establishment of a laydown area on the opposite side of Crump Street would result in a temporary visual impact to the item's setting for the duration of construction. The trees within the road reserve serve as a partial visual buffer. Mitigation measure HH5 will minimise tree removal in the laydown area at Crump Street to reduce the visual impacts on the heritage item.

5.13 Noise and vibration

5.13.1 Impact assessment approach

Submitter ID numbers

S-94193709, S-94770457, S-94956774, S-95105488

Summary of issues

Submitters commented on the noise and vibration assessment approach for the project. Specific comments included:

- perceived underestimation of traffic noise from heavy vehicle movements through Millfield
- lack of identification of a commercial receiver along Pokolbin Mountains Road in *Technical Report 8 - Noise and vibration impact assessment* of the EIS mapping, which means they may not be captured in relevant management plans
- concern that the existing traffic noise on Pokolbin Mountains Road had not been based on accurate peak traffic volumes associated with recreational vehicles on weekends

- queried how the noise and vibration assessment considered impacts to receivers along Pokolbin Mountains Road and Broken Back Road, as it does not appear in the noise catchment area descriptions and the background noise data used in the assessment was not considered to be representative of this area
- concern the noise and vibration assessment did not assess the passing bays and other upgrades to Pokolbin Mountains Road
- a request to re-run noise modelling to include residences on Cedar Creek Road in Pokolbin.

Response

A noise and vibration assessment was prepared to support the EIS for the project and was included as *Technical Report 8 – Noise and vibration impact assessment* and summarised in *Chapter 16 (Noise and vibration)* of the EIS. A noise and vibration impact assessment addendum was prepared to assess the amended project, *Appendix K (Noise and vibration impact assessment addendum)* of the Amendment Report.

The road traffic noise assessment has been undertaken in accordance with the NSW *Road Noise Policy*. The road traffic noise assessment is described in *Chapter 3 of Technical Report 8 – Noise and vibration impact assessment* and takes into consideration existing traffic noise levels and models traffic noise levels based on projected construction traffic volumes (consistent with *Table 5.4 and Table 5.6 of Technical Report 4 – Traffic and transport impact assessment*). This assessment has been completed for the construction routes to be used for access between the construction support sites, temporary worker accommodation, laydown areas, the HTP corridor, and switching stations. An increase of up to 2 dB represents a minor impact that is considered barely perceptible to the average person. Any increase in the total traffic noise level should be limited to 2 dB above that of the corresponding ‘no build option’. *Appendix K (Noise and vibration impact assessment addendum)* of the Amendment Report reassessed road traffic noise consistent with projected construction traffic volumes in *Appendix H (Revised traffic and transport impact assessment)*. Construction traffic on Wollombi Road in Millfield would likely result in a noticeable increase in noise levels (>2 dB) due to the relatively low existing traffic volumes on this road. However, compliance with the RNP criteria is predicted for all receivers.

All sensitive receivers have been identified along Pokolbin Mountains Road. The submitter is requesting a holiday rental be classified as a business or commercial receiver. However, the NSW ICNG separates commercial or industrial receivers into three categories: industrial premises, office and retail outlets, and other noise-sensitive businesses including theatres and childcare centres. Given that the use of the holiday rental would be similar to that of a residential dwelling, categorisation as a residential receiver and adopting a residential noise management level is most appropriate for the holiday rental rather than the less stringent commercial noise management level.

Quantitative increases in road traffic noise as a result of additional construction traffic have been calculated using the *Calculation of Road Traffic Noise* (UK Department of Transport, 1988) (CoRTN) calculation method to confirm compliance with RNP noise management levels at all receiver distances for each route. CoRTN does not use background ambient noise levels, rather it applies information on vehicle numbers, speeds and road surface (sealed or unsealed) to determine current and future road traffic noise. In the case of Pokolbin Mountains Road, existing traffic volumes for the road traffic noise were unavailable. Given the expected low volume of traffic on these roads, for

the purpose of calculating a potential increase in road traffic noise it was assumed that at least one non-project related light vehicle would use the road during the morning (night-time) and afternoon (daytime) peak hour period. This scenario therefore represents a worst-case road traffic noise scenario. The methodology is discussed further in *Appendix K (Noise and vibration impact assessment addendum)* of the Amendment Report.

The construction noise assessment was undertaken in accordance with the NSW EPA's *Interim Construction Noise Guideline*. Sensitive receivers have been identified within the study area via aerial imagery and site visits. *Technical Report 8 – Noise and vibration impact assessment* identified and classified all sensitive receivers within the study area (refer to *Appendix B* of the *Technical Report 8 – Noise and vibration impact assessment*). *Appendix K (Noise and vibration impact assessment addendum)* of the Amendment Report re-modelled the full amended project which includes Cedar Creek Road. Exceedances of 1-10dB (Clearly Audible) are predicted at up to one receiver on Cedar Creek Road during access track upgrades (earthworks with and without rock breaker) on Mount Baker Road and up to two receivers during construction of the transmission line. Refer to *section 5.10.3, Chapter 5 (Assessment of impacts)* of the Amendment Report and *Appendix K (Noise and vibration impact assessment addendum)* of the Amendment Report for further details on construction noise impacts.

Discrepancies in the noise and vibration assessment regarding the proposed upgrades on the full length of Pokolbin Mountains Road and Broken Back Road are noted and have been addressed in *Appendix K (Noise and vibration impact assessment addendum)* of the Amendment Report.

5.13.2 Construction traffic noise and management

Submitter ID numbers

S-92240456, S-94410706, S-94697206, S-94770457, S-94946207, S-94952721, S-94965556, S94995477, S-95012245, S-95114956

Summary of issues

Submitters raised concerns about the construction traffic noise expected from the project. Specific concerns included:

- impacts of construction traffic noise in Millfield, including potential impacts on the learning environment at Millfield Public School
- impacts from construction traffic noise associated with the use of Pokolbin Mountains Road, Broken Back Road, Mount View Road, Oakley Lane and Freemans Drive.

It was requested that the project considers acoustic fencing to manage construction traffic noise along Pokolbin Mountains Road and Broken Back Road.

Response

As discussed in *section 16.3.5, Chapter 16 (Noise and vibration)* of the EIS, construction traffic would result in an increase in road traffic noise. The construction road traffic noise impacts have been reassessed as part of the *Appendix K (Noise and vibration impact assessment addendum)* of the Amendment Report. For further detail, refer to *section 5.10.3, Chapter 5 (Assessment of impacts)* of the Amendment Report.

Construction traffic is likely to result in a noticeable (more than 2 dB) increase in noise levels on Wollombi Road, east of Cedar Creek Road during the night-time period, however road traffic noise levels on Wollombi Road during the daytime are not predicted to increase by more than 2 dB. An increase of up to 2 dB represents a minor impact that is considered barely perceptible to the average person. As such noise related to construction traffic is not predicted to impact the learning environment at Millfield Public School during the daytime when the school is in use.

The EIS identified a noticeable increase in road traffic noise on local roads where existing traffic volumes would be or were assumed to be low (refer to *Chapter 16 (Noise and vibration)* of the EIS). There were no available existing traffic volumes upon which to assume baseline road traffic noise levels on Pokolbin Mountains Road, Broken Back Road and Mount View Road.

The construction road traffic noise impact assessment has been reassessed in *Appendix K (Noise and vibration impact assessment addendum)* of the Amendment Report and shows construction traffic noise would comply with the RNP criteria on major roads including Freemans Drive. The approximate distance to comply with the RNP criteria on the roads identified within the submissions and the number of sensitive receivers within the offset distance are as follows:

- 69 metres on Mount View Road/ Mount Baker Road (sealed road section) – 32 sensitive receivers within the offset distance
- 207 metres on Mount View Road/ Mount Baker Road (unsealed road section) – 16 sensitive receivers within the offset distance
- 84 metres on Pokolbin Mountains Road (sealed road section) – no sensitive receivers within the offset distance
- 155 metres on Pokolbin Mountains Road/Broken Back Road (unsealed road section) – six sensitive receivers within the offset distance
- 94 metres on Oakley Lane (sealed road section) – no sensitive receivers within the offset distance
- 173 metres on Oakley Lane (unsealed road section) – no sensitive receivers within the offset distance.

Typical noise levels are likely to be lower than the predicted exceedances, as construction traffic would vary according to the stage of construction and the location of construction activity in the construction area. The predicted noise levels from construction traffic represent a worst-case scenario. Nonetheless, noise management measures (NV6) will be employed to minimise the potential for noise disturbance from construction traffic including limiting traffic movements to daytime periods as far as reasonable and feasible (refer to *Appendix D (Updated mitigation measures)* of the Amendment Report).

5.13.3 Construction noise management

Submitter ID numbers

S-94320457, S-94965456, S-95012245, S-95028957, S-95104707

Summary of issues

Submitters commented on the construction noise expected from the project and how it would be managed. Specific concerns included:

- impacts of noise generated from upgrading Pokolbin Mountains Road
- impacts of noise generated from out-of-hours stringing station along Oakley Lane
- impacts of noise from out-of-hours work causing sleep disruption for residents and guests at tourism accommodation.

It was also suggested that night-time movements and construction activities near accommodation should be restricted.

Response

The noise impacts presented in *Technical Report 8 – Noise and vibration impact assessment* and *Appendix K (Noise and vibration impact assessment addendum)* of the Amendment Report are a worst-case scenario and prior to any mitigation. For most construction activities, it is expected that the construction noise levels would frequently be lower than predicted, as the noise levels presented in this Submissions Report represent worst case scenarios. Construction noise is anticipated to be lower than that predicted in the worst-case scenario modelling. With the implementation of mitigation measures, the construction noise impacts would be further minimised.

A noise and vibration assessment on the upgrades to Pokolbin Mountains Road and Broken Back Road has been undertaken as part of *Appendix K (Noise and vibration impact assessment addendum)* of the Amendment Report. The assessment found that 13 sensitive receivers along Pokolbin Mountains Road may experience noise exceedances during the noisiest works of road upgrades (earthworks with rock breaker) as follows:

- up to 10 dB at two receivers
- 11 to 20 dB at seven receivers
- over 20 dB at one receiver
- over 75 dBA at one receiver.

During intersection works at McDonalds Road / Oakey Creek Road / Pokolbin Mountains Road intersection, up to 10 dB noise exceedance is predicted at one resident closest to the intersection.

The assessment found that nine sensitive receivers along Mount Baker Road may experience noise exceedances during the noisiest works of road upgrades (earthworks with rock breaker) as follows:

- 11 to 20 dB at three receivers
- over 20 dB at four receivers
- over 75 dBA at two receivers.

Refer to *section 5.10.3, Chapter 5 (Assessment of impacts)* and *Appendix K (Noise and vibration impact assessment addendum)* of the Amendment Report for further details. Noise management measures (NV3) will be employed to minimise the potential for noise disturbance from construction as far as reasonable and feasible (refer to *Appendix D (Updated mitigation measures)* of the Amendment Report).

Construction working hours are described in *section 4.4.6, Chapter 4 (Project description)* of the EIS. Construction of the project would generally be carried out during standard day-time hours between 7am and 6pm Monday to Friday and 8am to 1pm on Saturday as per the ICNG. However, some activities may be required outside of the project standard hours of work for safety, technical or public infrastructure operational reasons (e.g. to minimise utility or traffic disruptions). Refer to *section 4.4.6* of the EIS for a list of potential work which may occur outside standard hours if approved under an out of hours protocol.

Potential out of hours use of the stringing sites may be required at transmission line construction crossings of a main road or railway. Total out of hours noise exceedances for the HTP are predicted at up to 10 receivers. Exceedances of the sleep disturbance criterion are predicted during stringing at the stringing site crossing Cessnock Road, the M1 Pacific Motorway, Putty Road and Lemington Road; however, the highest predicted noise level at any residence is less than 65 dBA which would be unlikely to cause awakening reactions (Road Noise Policy). During detailed design and further construction planning, a program will be determined to identify the required night work periods (including dates and durations). Refer to *section 5.10.3* of the Amendment Report and *Appendix K (Noise and vibration addendum)* of the Amendment Report for further details.

Aside from emergencies, construction work will be carried out in accordance with an out-of-hours work protocol as required by mitigation NV3 and will not take place outside standard construction hours without prior notification to stakeholders in accordance with the protocol, and as documented and approved in the CEMP. The out-of-hours work protocol will identify appropriate respite for noise affected receivers, where required. Implementation of the NVMP (including the out-of-hours work protocol) would manage predicted noise and vibration impacts for identified sensitive receivers (refer to *Appendix D (Updated mitigation measures)* of the Amendment Report).

5.13.4 Operational noise

Submitter ID numbers

S-94879975, S-94995477, S-95012245, S-95108231

Summary of issues

Submitters were concerned that the noise from the transmission lines during operation would impact the amenity of residences close to the transmission lines and the peaceful environment for visitors.

Response

EnergyCo acknowledges the concerns raised by submitters in relation to operational noise. *Section 16.4.1, Chapter 16 (Noise and vibration)* and *section 5.2 of Technical Report 8 – Noise and vibration impact assessment* of the EIS assessed audible noise from the operation of the transmission lines (i.e. corona noise). The assessment has considered the effect of weather conditions on audible noise emission and found that under fair weather conditions, noise levels are predicted to be under the nighttime PNTL criteria (LAeq,15 min 35 dBA) at the edge of the HTP corridor and as such would be compliant at all receivers. *Appendix K (Noise and vibration impact assessment addendum)* of the Amendment Report re-modelled the full amended project taking into consideration realignment of the transmission line at Mount Thorley and Gouldsville and localised easement widening for conductor swing. Under a worst-case scenario (being light rain or mist conditions), transmission line operational noise levels for up to 12 residential receivers are predicted to be up to around 40 dBA, an increase in one receiver from the EIS due to a minor change in project mapping and receiver location refinement.

It is important to consider that corona noise (the electrical discharge from the conductors causing a crackling noise) only occurs under conditions of high dust, mist, or rain. It is worth noting that these conditions are infrequent and not reflective of typical weather conditions. During heavier rain events, general ambient noise levels in the environment would likely be higher and therefore potentially have a masking effect over any possible corona discharge noise. Noise disturbance under such circumstances is therefore likely to be low risk. It is noted that misty conditions typically occur for only short durations.

The assessment conservatively assumed the transmission line may be anywhere within the HTP corridor, with consideration of a minimum 70-metre easement. Additionally, the assessment is based on the horizontal distance between the HTP corridor and sensitive receivers and does not consider intervening terrain and sound propagation factors that are expected to reduce the noise levels at greater distances from the transmission line. Therefore, the significance of the impacts should be regarded as indicative and is expected to be reduced when further detailed design of the transmission line is undertaken.

As required by mitigation measure NV9, the predicted noise impacts will be reviewed during detailed design based on the final transmission tower location and conductor arrangement. Where an impact is identified based on the detailed design, monitoring will be undertaken to confirm actual operational noise levels. Appropriate solutions will be identified in consultation with landowners if exceedances are confirmed (refer to *Appendix D (Updated mitigation measures)* of the Amendment Report).

5.14 Surface water

5.14.1 Impact assessment approach

Submitter ID numbers

S-95064460

Summary of issues

A submitter raised concerns regarding the lack of appreciation of the importance of the headwaters at Wyong River in the description of the surface water study area.

Response

The concern by the submitter is noted. The surface water study area includes the Wyong River sub-catchment of the Tuggerah Lakes catchment (refer to *Figure 17.1* of the EIS) and is discussed in *Chapter 17 (Surface water)* and *Technical Report 10 – Surface Water impact assessment* of the EIS. *Table 4.1* of *section 4.2* in *Technical Report 10 – Surface Water impact assessment* states that the headwaters of the Wyong River catchment originate in the Olney State Forest and drain south into Tuggerah Lake. The Wyong River has been defined as a category 5 waterway using the Strahler stream order and is considered to be of moderate sensitivity, defined in the assessment methodology for the EIS surface water impact assessment as being a slightly to moderately disturbed catchment including agricultural areas and forests. While the headwaters of the Wyong River are located in largely undisturbed areas, the sub-catchment as a whole is considered to be of moderate sensitivity.

It is noted that the headwaters of the Wyong River are located to the west of the project impact area, about 1.3 kilometres from the closest access road that would be used by the project (Null Road) and more than four kilometres from the HTP corridor at its closest point. Given the distance between the project impact area and the headwaters, combined with the mitigation measures proposed to manage impacts to water quality, impacts to the headwaters of the Wyong River are not expected from construction and/or operation of the project. It is acknowledged that the project intersects with the Wyong River further downstream (and away from the headwaters) as part of the adjustments and upgrades to existing transmission lines. Key construction activities at this location that may impact on water quality include vegetation clearing, concrete batching and/or the storage and use of chemical and hazardous materials. The implementation of mitigation measures described in *Appendix D (Updated mitigation measures)* of the Amendment Report would effectively manage key risks to water quality

5.14.2 Water quality impacts

Submitter ID numbers

S-94995477, S-95096715, S-95096724, S-95097206, S-95097457, S-95108971, S-95114481, S-95114486, S-95114492, S-95116720, S-95117720, S-95118708, S-95119958, S-95119961

Summary of issues

Submitters were concerned by the potential water quality impacts of the project including impacts on:

- sensitive waterways, wetlands and groundwater that is essential for biodiversity, including from riparian habitat disruption, erosion, siltation and water pollution from runoff
- water used for agriculture including irrigation and stock water and farm dams
- drinking water sources (including tank water harvested from roofs) from dust generated by vehicle movements on nearby construction access routes
- Muggyrang Creek and Foxy Gully from use of Pokolbin Mountains Road causing erosion and sedimentation.

Response

The potential impacts of the project on surface water are discussed in *Chapter 17 (Surface water)*, *Technical Report 10 – Surface water impact assessment* of the EIS and *section 5.11, Chapter 5 (Assessment of impacts)* of the Amendment Report. This includes consideration of impacts to water quality, streamflow regime and watercourses and riparian corridors.

As acknowledged in this assessment, surface water quality in proximity to the project exhibits significant variability, influenced by the diverse land uses present. This includes National parks, State forests and conservation areas in the upland regions to agricultural regions and areas dominated by coal mining and energy generation in the Hunter Valley. Recognising the variability of surface water quality across the project impact area, the sensitivity of the receiving environment has been classified into 3 broad categories in order to establish the existing conditions and assess the potential impacts of the project. These categories (low, moderate and high sensitivity) consider:

- the existing level of disturbance for the catchment and receiving watercourses
- the susceptibility of bed and banks of watercourses to instabilities
- the presence of threatened aquatic species.

Table 17.6 of Chapter 17 (Surface water) of the EIS describes the classification of receiving environments as relevant to the existing surface water environment of the project impact area. The basis for classification considered the amount of disturbance present within the ecosystem and receiving watercourses and catchments, as well as topography and whether there was known presence of threatened species. Areas within the project impact area that were identified as highly vegetated watercourses, largely undisturbed and with steep topography were assigned as being highly sensitive receiving environments, including State Forests and State Conservation areas, as well as Dora Creek.

An assessment of the potential impacts of the project on surface water quality is provided in *section 6.1 of Technical Report 10 – Surface water impact assessment* and *section 17.3 and 17.4 of the EIS for construction and operation, respectively*. The assessment of surface water quality noted that risks to water quality are higher in the State forests where the topography is steep and where disturbance activities are located upstream of sensitive biodiversity areas. Steep topography increases the risk of erosion and sediment mobilisation due to higher velocity of runoff which can increase erosive forces, causing greater scour and mobilisation of sediments. The assessment concludes that these risks would be effectively managed through the implementation of the mitigation and management measures in *section 17.5 of the EIS*, including, but not limited to:

- development of a project specific soil and water management plan
- consideration of scour protection for any project infrastructure within a watercourse
- development of erosion and sediment control plans (ESCPs).

It should also be noted that in response to submissions received as part of the EIS regarding potential impacts to endangered frog species in Olney State Forest, detailed ESCPs have been prepared to support the revised biodiversity assessment for the project (refer to *Appendix E (Revised biodiversity development assessment report)* of the Amendment Report). The updated mitigation measures provided in *Appendix D (Updated mitigation measures)* of the Amendment Report require the inclusion of these plans as part of the ESCPs for the project as part of the soil and water management plan (mitigation measure SW1).

Section 4.6 of Technical Report 10 – Surface water impact assessment identified environmental receivers within and adjacent to the project impact area, including groundwater dependent ecosystems (GDEs), key fish habitat (KFH), and threatened frog breeding habitat. Areas containing GDEs, areas of KFH and/or threatened frog breeding habitat were considered to be highly sensitive in the assessment of potential surface water impacts of the project. An assessment of the potential impacts to GDEs, areas of KFH and/or threatened frog breeding habitat were included in *Technical Report 1 – Biodiversity development assessment report* and *Chapter 8 (Biodiversity)* of the EIS and superseded in *Appendix E (Revised Biodiversity development assessment report)* of the Amendment Report.

As discussed in *section 5.2 of Technical Report 10 – Surface water impact assessment*, the project has been designed and progressively refined to consider the identified environmental constraints as they relate to surface water, where reasonable and feasible, including:

- avoiding the placement of project infrastructure in watercourses and riparian corridors as far as reasonably practicable. Project infrastructure including construction support sites, laydown areas, stringing sites, and transmission towers and pads, have been located outside of riparian corridors, or minimised, as far as practical
- minimising the clearing of vegetation in riparian corridors by:
 - minimising the number and positioning of transmission towers to minimise vegetation clearance in riparian corridors
 - locating transmission towers in areas where vegetation clearance in riparian corridors is unavoidable, areas of clearance and watercourse crossings preferentially cross riparian corridors perpendicularly, rather than obliquely, which reduces the extent of riparian vegetation that requires clearance

- the inclusion of ‘no clearing zones’ which are areas within the easement where vegetation removal is not required. These areas of the easement would occur where there is sufficient separation of 10 metres or more between the maximum operating temperature conductor position and the existing vegetation. These non-disturbance areas typically cross valleys and watercourse depressions.

Dust impacts from construction and operation of the project were assessed in *Technical Report 18 – Air quality and greenhouse gas impact assessment* of the EIS. A summary of the construction dust assessment completed as part of *Technical Report 18 – Air quality and greenhouse gas impact assessment* is provided in *Table 22.5* of the EIS. *Table 22.5* of the EIS identified that there would be negligible mitigated dust risks relating to dust soiling, human health and ecological dust impacts from construction of the project. The air quality assessment was revised and is presented in *section 5.17* of the Amendment Report. The revision to the assessment included consideration of receivers within 250 metres from unsealed access tracks and proposed upgrades along unpaved roads in response to submission. The revised air quality assessment findings are consistent with the EIS, in that, there would be negligible mitigated dust risks relating to dust soiling, human health and ecological impacts.

On this basis, dust impacts affecting the water quality of water used for agriculture including irrigation and stock water and farm dams and drinking water sources including tank water harvested from roofs from dust generated by vehicle movements on nearby construction access routes, is expected to be negligible with the implementation of appropriate mitigation measures, including mitigation measures AQ1 and AQ2.

Dust emissions from operation of the project would be substantially lower than during construction. As a result, it is considered that operational air quality impacts from the project are likely to be negligible.

5.14.3 Management and mitigation

Submitter ID numbers

S-94996527

Summary of issues

A submitter queried how sewage disposal, runoff and pollution would be managed at the temporary worker accommodation and construction support sites to avoid impacts on the surrounding waterways.

Response

During construction of the project, wastewater from the construction support sites and temporary workers accommodation will be managed using contained on-site treatment systems or temporary storage tanks. Treated wastewater will not be discharged to the environment; instead, it will either be reused on-site for non-potable construction purposes or transported by a licensed contractor to an approved treatment facility at regular intervals.

Runoff and potential pollution will be controlled through site-specific drainage infrastructure, designed during detailed design to capture and manage stormwater before it can leave the site. In accordance with mitigation measure SW1, a soil and water management plan will be prepared to minimise impacts on soils and water, outlining erosion controls, stormwater management measures, spill prevention procedures and water quality monitoring to ensure surrounding waterways are protected (refer to *Appendix D (Updated mitigation measures)* of the Amendment Report for further details.

All temporary wastewater systems will be designed, operated and decommissioned in line with relevant best-practice guidelines and standards, and fully removed once construction is complete.

5.15 Soils and contamination

5.15.1 Impact assessment approach

Submitter ID numbers

S-94900217, S-95105488

Summary of issues

Submitters expressed concerns regarding the assessment of soil and erosion for the project, including the:

- limited erosion risk analysis for the Singleton Military Area
- lack of consideration of existing local constraints on soil and erosion on Pokolbin Mountains Road including the existing drainage constraints that result in erosion and soil loss
- lack of erosion and sediment assessment or mitigation measures for Pokolbin Mountains Road, noting the project impact area defined in *Figure 2.1 of Technical Report 9 – Soils and land impact assessment* is limited to the access track from the top of Pokolbin Mountains Road but does not include Pokolbin Mountains Road or the passing bays.

Response

A soils and land capability assessment was prepared to support the EIS for the project and was included as *Technical Report 9 – Soils and land resource assessment* and summarised in *Chapter 20 (Soils and contamination)* in the EIS. As part of the soils and land capability assessment, the project impact area was categorised into four soil management units (SMUs). The SMUs were derived from combining soil landscapes, soil types and land and soil capability classes which represented similar soil properties and susceptibility to project impacts.

The project impact area, where it intersects the Singleton Military Area was mapped as mostly occurring within land defined as SMU2 (Undulating mid lands). SMU2 is described as containing undulating rises, undulating low hills and footslopes and is characterised as being extensively cleared and generally used for livestock grazing of cattle on native and modified pastures. Some remnant woodland and open woodlands occur, for example within the Singleton Military Area. SMU2 is also described as having high erosion risk where surface disturbance occurs, during the widespread presence of sodic soils which are prone to dispersion and erosion. Mitigation measure

SL2 requires additional measures to be implemented, should sodic soils be identified, and may include applying gypsum as an ameliorant to displace the sodium and provide the soil with a stronger aggregate and hold structure when wet.

The local constraints on soil and erosion on Pokolbin Mountains Road are acknowledged. Pokolbin Mountains Road is shown in *Figure 11.3* as being within:

- soil management unit 1: uncleared rises, hills and escarpments for the western portion of the road, which is described as being associated with high erosion risk where surface disturbance occurs due to the nature of the terrain
- soil management unit 2: undulating mid lands soil management for the eastern portion of the road, which is described as representing a high erosion risk where surface disturbance occurs due to the widespread presence of sodic soils (i.e. Sodosols and Natric Kurosols) which are prone to dispersion and erosion.

As described in *section 5.3.1* of this Submissions Report, inconsistencies in some mapping for Pokolbin Mountains Road have been identified, including an error in *Figure 2.1* as noted in the submission. Despite this, *Technical Report 9 – Soils and land resource assessment* assessed the entire length of the Pokolbin Mountains Road identified as an access road (including the potential locations of passing bays), as shown in *Figure 3.3* of *Technical Report 9 – Soils and land resource assessment* and the other technical figures, and therefore is captured in relevant mitigation measures.

A project specific soil and water management plan (SMWP) will provide mitigation measures to minimise impacts on soils and water. The SWMP will identify foreseeable risks relating to soils erosion and water pollution during construction and describe how these risks will be managed. It will include a description of soil and water management approaches, methods for impact assessment and monitoring and mitigation measures. The soil and water management plan requirements are included as part of mitigation measure SW1. In addition, mitigation measure SW3 requires the development of ESCPs, which will be implemented in consultation with a Certified Professional in erosion and sediment control for all disturbance activities. ESCPs will include additional consideration for areas identified as being high risk.

Further, mitigation measure TT14 provides for the identification of any ongoing works required to maintain a suitable level of usability of the road, including clearing of any impediments to road drainage along Pokolbin Mountains Road, where practicable (refer to *Appendix D (Updated mitigation measures)* of the Amendment Report).

5.15.2 General soil impacts

Submitter ID numbers

S-94697206, S-94879975, S-95105488, S-95114481, S-95114492, S-95118708

Summary of issues

Submitters expressed concerns regarding the impacts on soil and contamination from the project, including increased risk of:

- soil loss, displacement, erosion and landslips including from increased traffic along unsealed roads such as Pokolbin Mountains Road
- soil erosion, compaction and soil contamination from vegetation clearing
- erosion along creeks and watercourses.

Response

The assessment of potential soil and contamination impacts of the project are provided in *Technical Report 9 – Soils and land impact assessment* and *Technical Report 13 – Contamination preliminary site investigation* of the EIS and summarised in *Chapter 20 (Soils and contamination)* of the EIS.

The potential impacts of the project on soils and erosion during construction are summarised in *section 20.3.1* of the EIS, which notes

‘Construction of the project would temporarily expose the natural ground surface and sub-surface through the removal of vegetation, earthworks activities and excavation of surface soils. The exposure of soil to surface water runoff and wind can increase soil erosion potential, particularly where construction activities are undertaken in soil landscapes susceptible to erosion’.

Section 5.1 of Technical Report 9 – Soils and land resource assessment further acknowledges there is a high potential for soil dispersion where soils are disturbed by construction activities, particularly if they are left bare, remoulded, compacted or pulverised during construction. Soil erosion risk is identified as especially high for exposed services on steeper inclines within Soil Management Units 1 and 2, which includes the area surrounding Pokolbin Mountains Road. As identified in *section 5.15.1* of this Submissions Report, mitigation measure TT14 provides for the identification of any ongoing works required to maintain a suitable level of usability of the road, including clearing of any impediments to road drainage along Pokolbin Mountains Road, where practicable (refer to *Appendix D (Updated mitigation measures)* of the Amendment Report).

The assessment also acknowledges that impacts to streambank edges or gullied terrain would result in a high-water erosion risk during rainfall events. Impacts associated with water erosion will be minimised through mitigation measure SW2, which requires scour protection to be considered for any infrastructure within a watercourse and for the design to incorporate features that minimise impact on flow conditions and the natural function of the watercourse, where possible.

Impacts to riparian corridors would also be associated with vegetation clearance for the transmission alignment, the installation of watercourse crossing for access tracks, and the construction of the Olney switching station. Clearing of vegetation within riparian corridors would be undertaken in accordance with the methods described in *Chapter 4 (Project description)* and

section 17.5, Chapter 17 (Surface water) of the EIS. This approach will reduce impacts to riparian corridors and maximise stability of the watercourses.

Construction activities including earthworks, vegetation clearing, vehicle movements and utility works, has the potential to cause soil disturbance. This could result in the exposure of existing contaminated soils, where present, which poses a risk to ecological or human health, if not properly managed. Most areas of contamination concern within the construction impact area were evaluated as having a low risk of exposure causing impacts to ecological or human health during construction.

Mine lease areas were evaluated to pose a medium to high risk during construction due to the higher potential to encounter soil contamination during excavation activities, including exposing areas of high carbon material (HCM) in discrete locations. The existing power stations and Dyno Nobel Warkworth facility were also evaluated to pose a medium to high risk during construction based on a high likelihood for contamination (from power station infrastructure such as the diesel fuel tank farm, flocculant tanks and associated chemicals, water treatment system and power infrastructure).

These risks will be managed through preparation and implementation of an erosion and sediment control plan (ESCP) that will be prepared as part of the SWMP and will include site specific erosion and sediment controls that address specific soil dispersion risks based on disturbance activity, phase of the project and terrain and soil characteristics. These controls will be informed by further field assessment and laboratory testing of soils within the construction disturbance area, with a focus on the areas identified as higher risk, to improve on the broad scale findings of the assessment and inform more specific erosion and sediment controls. A more detailed description of the approach to manage soil and erosion risks is provided in section 20.5 of the EIS.

Following the implementation of recommended management measures (see section 20.5 of the EIS), it is anticipated that the identified risk to the project from encountering contaminated soil would be effectively managed through the implementation of risk controls and an unexpected finds protocol.

5.15.3 Management and mitigation

Submitter ID numbers

S-94876957, S-95108971

Summary of issues

Submitters commented on the management of soil erosion from the project. Specific comments included:

- how the land is proposed to be cleared, and whether options other than bulldozing have been considered to reduce the risk of erosion or land degradation
- the mitigation measures for soil erosion only apply to the construction works (such as stockpiling)
- lack of detailed measures for drainage controls, concept ESCPs, in-text references to the requirements of Landcom (2004) and Managing Urban Stormwater, *Volume 2 C*, Unsealed Roads (DECC 2008).

Response

The methodology for land clearance will be developed in greater detail by the construction contractors during detailed design and further construction planning and will be informed by the requirements identified to control erosion and sediment as well as any other specific requirements to manage other constraints such as biodiversity values. For example, for areas of known threatened species habitat in disturbance areas B and HZ (as defined in the *section A.3.1 of Appendix A (Updated project description)* and *Appendix E (Revised biodiversity development assessment report)* of the Amendment Report)), work methods such as manually dismantling of trees with chainsaws without damaging the ground or shrub layer, would be required.

Sensitive biodiversity areas have also been identified in *Appendix E (Revised biodiversity development assessment report)* of the Amendment Report. These are areas of high ecological value that require specific clearing controls to avoid and minimise impacts on potential SAI entities, as well threatened species and communities, including:

Sensitive biodiversity areas have also been identified in *Technical Report 1 – Biodiversity development assessment report*. These are areas of high ecological value that require specific clearing controls to avoid and minimise impacts on potential SAI entities, as well threatened species and communities, including:

- Warkworth Sands Woodland threatened ecological community
- Breeding habitat for threatened fauna (Amphibians, Microbats)
- Important habitat for Gang-gang Cockatoo and Sooty Owl
- All recorded threatened flora species, including *Rhodamnia rubescens*
- Riparian zones (five metre buffer from top of bank).

Additional no clearing zones from the *Technical Report 1 – Biodiversity development assessment report* have been identified within the transmission line easement (particularly in Olney State Forest) where vegetation removal is not required and where no access is required during both construction and operation. No clearing zones do not form part of the amended disturbance area.

The clearing controls applied in these areas include (but are not limited to):

- hand clearing within to avoid and minimise impacts (relevant to Disturbance area B)
- no tracked machinery in riparian buffers and threatened flora zones
- erosion and sediment controls to avoid impacts on downstream amphibian habitat
- protocols to minimise the spread of Chytrid Fungus Disease (for amphibians) and Myrtle Rust (for *Rhodamnia rubescens*)
- timing restrictions during breeding periods (microbat, Gang-gang Cockatoo, Sooty Owl breeding period).

As discussed in *Appendix E (Revised biodiversity development assessment report)* of the Amendment Report, a detailed clearing and grubbing environmental work method statement (EWMS) will be prepared and implemented for all clearing activities. It will provide the relevant clearing methodology to accommodate:

- site specific conditions such as topography and ground stability
- access to the clearing locations
- disturbance area categories.

Technical Report 9 – Soils and land resource assessment provides mitigation measures for erosion and sedimentation control, including measures that would apply to the operational phase of the project including mitigation measures SL6 and SL7 (refer to *Appendix D (Updated mitigation measures)* of the Amendment Report).

With regards to soil mitigation measures during operation, it is noted in *section 17.5.1, Chapter 17 (Surface water)* of the EIS and mitigation measure SW1 that a project specific SWMP will provide mitigation measures to minimise impacts on soils and water. The SWMP will identify foreseeable risks relating to soil erosion and water pollution during construction and describe how these risks will be managed. It will include a description of soil and water management approaches, methods for impact assessment and monitoring, and mitigation measures. At the completion of construction, appropriate measures will be carried into the network operator's procedures and work method statements for the project in accordance with their accredited environmental management system (EMS).

The description of the requirements of the soil and water management plan is provided in *sections 17.5.1 and 17.5.2* of the EIS, and reflected in mitigation measure SW1 (refer to *Appendix D (Updated mitigation measures)* of the Amendment Report). This includes mitigation measure SW3, requiring the development of ESCPs, which will detail the processes, responsibilities and measures to manage potential soil and water quality impacts in accordance with the principles and requirements in:

- *Managing Urban Stormwater – Soils and Construction, Volume 1* (Landcom 2004), *Volume 2A* (DECC 2008a) and *2C* (DECC 2008b), commonly referred to as the 'Blue Book'
- *Best Practice Erosion and Sediment Control* (IECA 2008)
- *Guidelines for controlled activities (Riparian corridors)* (DPE Water 2022a) and *Watercourse crossings* (DPE Water 2022b).

In accordance with mitigation measure SW3, ESCPs will be developed, prior to construction, and implemented in consultation with a Certified Professional in erosion and sediment control for all disturbance activities. ESCPs will include additional considerations for areas of high risk (e.g. high slopes) and located upstream of sensitive biodiversity areas (i.e. State forest areas). Refer to *Appendix D (Updated mitigation measures)* of the Amendment Report for further details.

5.16 Hazards and risks

5.16.1 Bushfire risks – assessment approach

Submitter ID numbers

S-93336707, S-93943712, S-94193709, S-94818719

Summary of issues

Submitters stated that there is no analysis of the project on fire resilience including impacts on firefighting and lack of assessment of increased fire danger.

Response

A bushfire risk assessment was prepared to support the EIS for the project and was included as *Technical Report 14 – Bushfire risk assessment* of the EIS and summarised in *Chapter 21 (Hazards and risks)* of the EIS.

The assessment was based on current and historical data, as well as future projections and considered both bushfire risks from the project (including ignition potential) and risks to the project, in accordance with *Planning for Bush Fire Protection 2019* and *Australian Standard ISO 31000:2018 – Risk management*.

Consultation with the NSW Rural Fire Service (RFS) and FCNSW informed the alignment selection and confirmed that the proposed works would not impede aerial or ground-based firefighting operations. The improved access roads would also enhance emergency response capabilities for local communities during bushfire events. For more details on how the project addresses issues raised by FCNSW and RFS see *sections 8.13 and 8.15* of this Submissions Report.

5.16.2 Bushfire risks – general impacts, management and mitigation

Submitter ID numbers

S-92240456, S-92611207, S-93336707, S-93943712, S-94193709, S-94410706, S-94818719, S-94879975, S-94956774, S-94995477, S-95028957, S-95096715, S-95096724, S-95097206, S-95097457, S-95114481, S-95114486, S-95114492, S-95114715, S-95114723, S-95116720, S-95117720, S-95118708, S-95119958, S-95119961

Summary of issues

Submitters commented on the bushfire risks associated with the project and how they will be minimised during construction and operation.

Specific comments relating to bushfire risk during construction included:

- concerns that the construction of the project would increase bushfire risk related to ignition from construction machinery, traffic and vegetation clearing
- requests for clear mapping and protection of evacuation routes for residents, visitors and construction workers in high-risk areas such as Pokolbin Mountains Road

- requests for limits on construction activity during Total Fire Ban days and the high fire-risk season, including restrictions on hot works.

Specific comments relating to bushfire risk during operation included:

- concerns regarding increased risk of ignition from transmission line failures including fallen lines and how this will be managed
- concerns regarding operational arrangements for de-energising or reconfiguring the line during periods of extreme fire weather
- concerns that the new transmission lines may restrict firefighting, including aerial firefighting and that there is lack of mitigation to improve firefighting capacity
- concerns regarding increased access to bushland enabling unauthorised entry and increased arson risk
- concerns that access tracks upgraded or created for the project may require long-term maintenance funding or integration into Fire Access and Fire Trails Plans.

Submitters also provided the following suggestions for the management of bushfire risk:

- preparation of a coordinated bushfire management plan that is prepared in consultation with NSW RFS, FCNSW, Cessnock City Council and other stakeholders, and is approved prior to any clearing or construction
- preparation of a comprehensive fire management strategy or post-construction rehabilitation plan for access corridors near residential zones and Millfield Public School
- requests for regular, independent auditing of vegetation management and ignition-mitigation measures during operation, with audit findings made publicly available
- provision of on-site fire response capability at construction compounds and tower worksites
- suggestion to build, maintain and signpost access tracks to Rural Fire Services standards to realise benefits for firefighting from the new access tracks created by the project
- suggestions to enhance firefighting by building dams, providing water tanks and a quick response fire unit near the transmission line route, and to establish a dedicated fund for ongoing maintenance of access trails.

Response

Bushfire risk during both construction and operation of the project was assessed in *Technical Report 14 – Bushfire risk assessment* (see sections 5.1 and 5.2.1) of the EIS. The assessment considered potential ignition sources, fire behaviour, fire weather, vegetation, and topography across the HTP corridor in accordance with *Planning for Bush Fire Protection 2019* (RFS 2019) and assessed using an approach consistent with *ISO 31000:2018 – Risk management* (ISO 2018). The assessment concluded that, with the identified mitigation measures in place, bushfire risk to and from the project would be low and as low as reasonably practicable.

Construction

During construction, the report identified that machinery operation, vegetation clearing, hot works, and vehicle movement present potential ignition sources (see section 5.1.2 of *Technical Report 14 – Bushfire risk assessment*). These risks would be managed through strict controls, including work restrictions during Total Fire Ban days, mandatory fire suppression equipment on all mobile plant, emergency response training, and the preparation and implementation of a bushfire emergency

management and evacuation plan (BEMEP). Bushfire prevention measures would also apply to temporary worker accommodation and construction support sites, as described in mitigation measure BF2.

Work controls on Total Fire Ban days are set and administered by the RFS. Hot works may only proceed under RFS conditions and contractor hot-works permits. EnergyCo and the construction contractor cannot declare or vary Total Fire Ban restrictions. Compliance will be embedded in the BEMEP.

The use of access tracks for emergency response was also considered in the *Technical Report 14 – Bushfire risk assessment* (see section 5.3). The construction and upgrading of access tracks along the HTP corridor will enhance emergency egress and access for firefighting and maintenance vehicles. Consultation with NSW RFS and FCNSW informed the design and siting of these tracks to ensure they support regional fire management objectives and do not impede existing fire trails or strategic fire control lines.

Operation

During operation, the likelihood of 500 kV transmission assets starting a bushfire that could spread beyond the corridor and cause significant consequences is very low. No bushfires have been recorded as having been caused by 500 kV transmission lines in New South Wales or elsewhere in Australia, due principally to robust asset design and maintenance standards applied to critical electricity infrastructure. The perception that overhead powerlines constitute a high bushfire risk is based on the history of bushfire ignitions from distribution network infrastructure (voltages up to 66 kV) which have a different risk profile than a 500 kV transmission network.

Specific fire behaviour modelling was undertaken for the project and concluded that the project's vegetation management and transmission design will also not increase local fire behaviour or danger (see section 4.8.2 of *Technical Report 14 – Bushfire risk assessment*). Similarly, relevant Asset Protection Zones (APZs) have been calculated for relevant sections of the project, further increasing the resilience of the project.

To consider the amended project, an addendum bushfire risk assessment has been completed as part of the Amendment Report (*Appendix M (Bushfire risk assessment addendum of the Amendment Report)*). As described in section 5.15.2 of the Amendment Report the amended project would not change fire behaviour as concluded in *Technical Report 14 – Bushfire risk assessment*.

Aerial firefighting considerations were also addressed in the *Technical Report 14 – Bushfire risk assessment* (see section 5.2.1). Consultation was undertaken with the NSW RFS and FCNSW regarding the potential for transmission infrastructure to prevent aerial firefighting operations. The spacing of towers and the defined easement allow for continued safe operation of firefighting aircraft. The project's design and easement management approach aligns with NSW RFS operational requirements to maintain adequate clearance for aerial suppression activities. In addition to aerial firefighting, mitigation measure BF8 outlines a requirement for firefighting water supply in relevant locations near Bayswater South and Olney switching stations. Construction support sites

Management

The project design and maintenance program incorporate multiple safeguards, including compliance with AS5577:2013 *Electricity Network Safety Management Systems* (Standards Australia 2013), vegetation clearance of at least 13.5 metres below conductors, and ongoing vegetation management within the transmission line easement to maintain safe operating conditions. The mitigation measure BF4 is designed to ensure that the project is designed, operated and maintained to reduce bushfire risk to and from project infrastructure in accordance with the applicable standards, to ensure that the project would not increase bushfire ignition risk or materially affect community safety.

Routine de-energising of 500 kV assets during extreme fire weather is not proposed. Operational decisions will be made by the network operator in accordance with electricity network safety management systems and real-time system conditions, including consideration of requests to de-energise transmission lines from the NSW Rural Fire Service, during bushfire emergencies. The very low ignition likelihood, design clearances and vegetation management outlined above addresses operational bushfire risk.

Concerns regarding arson risk and unauthorised access are noted; however, the report does not consider this given that arson and unauthorised access are external, human-driven risks that cannot be reliably predicted, quantified or managed through transmission project design or operational controls. These matters are typically addressed through law enforcement, community engagement and education, rather than specific bushfire risk assessments.

The project is not proposing a dedicated fund for long-term maintenance of regional access trails. Responsibility for ownership, designation (e.g. Fire Access and Fire Trails Plans) and maintenance of fire trails rests with the relevant land manager and emergency services framework. Newly constructed access tracks for the project will be designed and constructed to relevant standards for their intended function. Ongoing maintenance responsibilities for project access tracks will align with landowner/agency agreements.

The request for a coordinated bushfire management plan is addressed through the BEMEP. The BEMEP will be prepared for construction in accordance with mitigation measures and the subject to conditions of relevant approvals and, consistent with the staging/sequence of works and final support-site layouts.

The BEMEP will map construction-related evacuation and trigger-action response plans for the workforce. Information may be shared locally for awareness; however, bush fire survival planning remains the responsibility of RFS and the individual.

During operation, vegetation management and associated compliance auditing will be undertaken by the network operator in accordance with its standards and regulatory approvals, which would include annual bushfire risk management reporting to IPART (see section 7.1.7 of *Technical Report 14 – Bushfire risk assessment*).

As outlined above, the project will implement strategies for managing risk during construction and operation. Bushfire response, suppression and deployment of firefighting appliances are the responsibility of the RFS, Fire and Rescue NSW and other authorised fire authorities under the *Rural Fires Act 1997*.

Overall, the project incorporates comprehensive bushfire prevention and emergency management measures consistent with industry standards and RFS guidance. These measures ensure that bushfire risk associated with the project's construction and operation would remain low, and that the project would not increase fire danger to surrounding communities or affect firefighting capacity within the region.

5.16.3 Aviation safety – assessment approach

Submitter ID numbers

S-94087956, S-94175994, S-94613255, S-94668223, S-94668226, S-94954711, S-94959206, S95013210, S-95023957, S-95032708, S-95042456, S-95082457, S-95107050

Summary of issues

Submitters commented on the Aviation Impact Assessment (AIA), particularly in relation to impacts on the Hunter Valley Gliding Club. Specific comments or concerns included:

- the accuracy of information used in the aviation impact assessment, including the misrepresentation of the Obstacle Limitation Surface (OLS) intrusion, runway measurements and assumptions about landing runways, club and state procedures and regulations
- the AIA omitted information including changes to other nearby infrastructure and potential impacts of towers on the Hunter Valley Gliding Club, with the towers and transmission lines creating a 'wall' effect rather than an obstacle from an aviation perspective
- the adequacy of a 220 feet clearance given the inconsistencies in distance measurements between the airstrip and the transmission corridor
- the risk assessment presented in the AIA is inadequate and subjective, in particular, that it did not adequately consider normal and abnormal operations, emergency scenarios, weather conditions, or reduced aircraft performance. Submitters stated that a formal risk assessment with involvement of CASA and Gliding Federation of Australia should have been undertaken, with consideration of draft CASA guidelines and its revised classification approach
- that the report is biased and should be completed independently from EnergyCo
- the AIA did not adequately consider atypical take-offs, suboptimal climb rates, straight-in approaches and emergency situations that may result in aircrafts being lower than expected and off-track.

Response

Information used in *Technical Report 16 – Aviation impact assessment* in the EIS, such as the Obstacle Limitation Surface (OLS), runway measurements, and other operational details, were obtained through a combination of stakeholder engagement, including consultation with the Hunter Valley Gliding Club, a review of available aerodrome data, and industry-standard assessment methodologies. It was acknowledged that uncertified aerodromes like Warkworth Aerodrome do not have a formal OLS. Therefore, for the purposes of the assessment, an OLS consistent with a Code 1 non-instrument with runway length of 1,550 metres was utilised (as determined through consultation with the Hunter Valley Gliding Club), as detailed in *section 5.6.1 of Technical Report 16 – Aviation impact assessment*. This approach was adopted to provide a conservative and transparent basis for assessing potential impacts. EnergyCo notes that there have been some queries raised in

relation to the selection of the assumed OLS, and further consideration was given to the appropriateness of the runway code used for assessment and its associated OLS.

In particular, CASA's submission queried whether a nominal Code 2 categorisation could be applicable. EnergyCo has considered this and the runway classification/OLS rationale. A Code 2 categorisation would not be appropriate in its current, as the runway generally would not meet standard requirements; however, under a hypothetical Code 2 OLS the nearest structure is approximately 2.8 metres below the approach/take-off surface, while intersections with the inner horizontal and conical surfaces remain to be managed via mitigations. More information on the applicability of a Code 2 OLS is provided in *section 8.16* of this Submissions Report, and *section 5.6.1* of *Technical Report 16 – Aviation impact assessment* of the EIS

Technical Report 16 – Aviation impact assessment of the EIS is considered the most current information available at the time of assessment, including known changes to nearby infrastructure. The alignment of the transmission line and the potential for a 'wall' effect were specifically addressed in the assessment, with detailed analysis of launch and landing trajectories, circuit patterns, and emergency scenarios in *section 5.6.1* of *Technical Report 16 – Aviation impact assessment*. Further analysis of the Warkworth aerodrome recognises that elements of the inner horizontal surface would theoretically be intersected by parts of the corridor if it was a certified aerodrome; However, even in certified aerodromes, for visual flight rules operations such intersections can be accepted following aeronautical assessment and, with the specified mitigations, do not constitute an unacceptable operational barrier. Marking and lighting requirements will be confirmed during detailed design in accordance with AS3891 (Parts 1–2) and in consultation with relevant stakeholders (including Hunter Valley Gliding Club), noting that the Civil Aviation Safety Regulations does not mandate marking/lighting outside of an OLS. The assessment concluded that, with mitigation measures in place, the transmission line would not create an unacceptable barrier to safe glider operations.

Regarding clearance distances, *Technical Report 16 – Aviation impact assessment* in the EIS modelled a range of operational scenarios, including worst-case launch and emergency situations. Normal-operational clearances of 220 feet were set based on the tallest transmission towers, estimated climb rates, and runway-to-corridor distance based on conservative performance assumptions. These calculations are discussed in *section 5.6.1* of *Technical Report 16 – Aviation impact assessment*, which acknowledged that actual clearance could vary depending on aircraft performance, weather, and pilot technique, and recommended that pilots and operators incorporate these factors into their operational planning. This is consistent with the Civil Aviation Safety Regulations Part 91, which requires that the pilot in command of an aeroplane must ensure that the aeroplane has the performance to clear all obstacles by a safe margin.

Technical Report 16 – Aviation impact assessment in the EIS does not include a formal, standalone risk assessment (such as a risk matrix, register or other similar tools). It instead assessed operation risks through scenario modelling, conservative assumptions and analysis, these are detailed in *Chapter 5* of *Technical Report 16 – Aviation impact assessment* in line with CASA's National Airports Safeguarding Framework (NASF). Ongoing consultation with relevant aviation stakeholders was recommended as part of the projects mitigation measures and will be continued during the detailed design and implementation phase of the project.

The risk analysis in *Technical Report 16 – Aviation impact assessment* in the EIS considered both normal and abnormal operations, including emergency scenarios, suboptimal climb rates, and atypical approaches, using conservative assumptions to ensure safety margins as shown in section 5.6.1 of *Technical Report 16 – Aviation impact assessment*. However, it is acknowledged that no assessment could account for every possible operational variable. To assist Hunter Valley Gliding Club in their continued operation at the Warkworth Aerodrome, EnergyCo has facilitated a risk assessment with Hunter Valley Gliding Club and a qualified aviation expert to assist Hunter Valley Gliding Club in considering the operational implications of the construction of the HTP in relation to their safety management system and operational procedures. EnergyCo acknowledges that ongoing engagement with operators is essential to ensure that emerging risks are identified and managed.

Technical Report 16 – Aviation impact assessment in the EIS was prepared by an aviation consultant in an unbiased manner, using established methodologies and in consultation with a range of stakeholders. EnergyCo acknowledges the community feedback and has taken all responses into account. Further engagement with the Hunter Valley Gliding Club and Gliding Australia was undertaken following exhibition of the EIS to better understand their concerns as they relate to the impacts of the project and assist in informing the appropriateness of management and mitigations measures.

Future engagement will continue throughout the detailed design and construction phases as recommended in section 6 of *Technical Report 16 – Aviation Impact Assessment* to ensure that aviation safety risks remain manageable and that mitigation measures remain effective and responsive to operational needs.

5.16.4 Aviation safety – general impacts

Submitter ID numbers

S-94087956, S-94462956, S-94563207, S-94668226, S-94673957, S-94954711, S-94957709, S94996501, S-94999209, S-95032708, S-95047460, S-95047724, S-95082457, S-95095706, S95107050, S-95109207, S-95116458

Summary of issues

Submitters expressed concerns regarding the aviation safety risk, particularly in relation to the Warkworth Aerodrome used by the Hunter Valley Gliding Club. Specific concerns were in relation to:

- the project causes significant risks to the safety and viability of Hunter Valley Gliding Club due to hazards for launching and landing gliders and restrictions on airspace due to impacts on the OLS from the height and location of the transmission lines and preclude training and future competitions at the Hunter Valley Gliding Club
- the transmission lines pose a safety risk that may lead to fatalities at the Warkworth Aerodrome, particularly for inexperienced pilots and during any emergency, unplanned or unpowered landings
- restrictions on safe landing options, including options for landing outside of the airfield
- impact on the annual Vintage Gliders Australia regatta held by the Hunter Valley Gliding Club.

Response

The aviation safety impacts are considered in *section 5.6 of Technical Report 16 – Aviation impact assessment* and *section 21.4.5 in Chapter 21 (Hazards and risks)* of the EIS. A number of aviation operations, including launch and landing sequences were considered within *Technical Report 16 – Aviation impact assessment*. An ‘indicative emergency response action review’ was also included within the assessment. While the indicative emergency response action is provided within *Technical Report 16 – Aviation impact assessment*, it is important to note that each aerodrome operator is responsible for developing their own emergency response strategy and controls, specific to their needs and operations.

EnergyCo acknowledges concerns relating to infringements to the unofficial OLS. OLS infringements have been assessed at the Warkworth Aerodrome, which indicates that the inner horizontal surface will be infringed by the project’s corridor. *Section 7 of Technical Report 16 – Aviation impact assessment* details mitigation measures to ensure compliance and safe airspace for glider operations. While uncertified aerodromes do not have official OLS, *Technical Report 16 – Aviation impact assessment* assumed an OLS of a Code 1 runway at a length of 1550 metres for assessment purposes. Infringements to the inner horizontal surfaces are permitted subject to an aeronautical study.

Outlanding (landing in a location other than the planned runway) considerations are also addressed as part of *Technical Report 16 – Aviation impact assessment* which indicates that outlanding in a suitable paddock within 30 degrees of the runway heading to the east of Warkworth Aerodrome is feasible. Further detail can be found in *Table 7 of Technical Report 16 – Aviation impact assessment*.

Section 5.6 of Technical Report 16 – Aviation impact assessment concluded that no adverse impacts would be associated with the HTP if mitigation measures are implemented, and that training and competition activities at the Hunter Valley Gliding Club, including the annual Vintage Gliders Australia regatta, can continue safely with mitigation measures in place.

The mitigation measures identified in *Chapter 7 of Technical Report 16 – Aviation impact assessment* broadly include: information sharing, undertaking helicopter and drone operations in accordance with applicable regulations and standards, stakeholder engagement to determine the appropriateness of obstacle lighting and marker balls on permanent structures, as well as obstacle lighting requirements for temporary structures.

EnergyCo has facilitated a risk assessment with Hunter Valley Gliding Club and a qualified aviation expert to assist Hunter Valley Gliding Club in considering the operational implications of the construction of the HTP.

5.16.5 Aviation safety – management and mitigation

Submitter ID numbers

S-94462956, S-94613255, S-94668223, S-94976464, S-95023957, S-95082457, S-95107050, S95109207, S-95116458

Summary of issues

Submitters suggested ways to manage and mitigate risks to aviation safety, particularly for the Hunter Valley Gliding Club at Warkworth aerodrome, including to:

- investigate opportunities to relocate or lower transmission lines and towers to reduce aviation risks near Warkworth aerodrome and surrounding paddocks
- suggestions for mitigation measures the project can implement, including installation of aerial warning markers and consideration of Hunter Valley Gliding Club's operational requirements in the planning of the project
- install obstacle hazard lighting, ideally sensor-activated to avoid nighttime nuisance
- develop a comprehensive safety management plan including enhanced marking and visibility, funding for safety upgrades, updated procedures, training, communication protocols, and long-term review
- develop mitigations in ongoing consultation with Hunter Valley Gliding Club.

Response

Investigations for the HTP alignment initially included 19 routes as detailed in *section 3.3, Chapter 3 (Alternative and options)* of the EIS. The final route was selected based on a number of criteria including maximising the use of mine owned land and existing easements where feasible; as well as taking into consideration social, environmental, strategic and technical considerations. Towers 139 to 144 are closest to the uncertified Warkworth Aerodrome and are influenced by several local factors including land-use and flooding risks. These factors create technical challenges and limit the ability to alter the alignment in the area.

Mitigation measures, including the potential installation of aerial warning marker balls and consideration of Hunter Valley Gliding Club operational requirements are addressed in *Chapter 7 of Technical Report 16 – Aviation impact assessment*. The suitability for additional marking or lighting for uncertified aerodromes was further explored in consultation with relevant aviation stakeholders as appropriate during a risk assessment workshop. The outcomes of the risk assessment will be provided to the Hunter Valley Gliding Club and Gliding Australia to inform the update of their own systems and procedures.

Obstacle hazard lighting is discussed in *Technical Report 16 – Aviation impact assessment* and detailed in mitigation measure AS5, which details 'Obstacle lighting and marking of the transmission lines is not considered to be required outside of the lateral limits of certified airports' OLS. Whilst not currently a requirement, this would need to be confirmed by CASA. The provision of markers on transmission lines and towers within 3 nautical miles of an uncertified aerodrome and the Singleton Military Area should be discussed with the appropriate stakeholders during detailed design'. Sensor-activated lighting is not standard practice and given that during daytime flights the sensors would not be particularly visible, the implementation in the corridor would not be typical. Consideration

was given to strobe lighting during the risk assessment workshop undertaken with Hunter Valley Gliding Club and Gliding Australia. EnergyCo will continue to consider these mitigation measures through consultation with relevant organisational stakeholders such as the Hunter Valley Gliding Club.

The development of a safety management plan is primarily the responsibility of the operators of aerodromes, such as the Hunter Valley Gliding Club, given the diversity and variability of aviation operations in the area. The primary purpose of *Technical Report 16 – Aviation impact assessment* is to detail the potential impacts that the HTP may have on aviation activity in its vicinity, and the required mitigations that EnergyCo would implement.

Overall, the aviation assessment provides relevant and actionable management and mitigation measures that are consistent with industry standards. Further engagement with stakeholders will be undertaken in line with the mitigation measures AS1, AS2, AS3, AS5 and AS6 of *Technical Report 16 – Aviation impact assessment* to ensure that aviation risks associated with the projects construction and operation remain manageable for stakeholders in the surrounding communities.

5.16.6 Electric and magnetic fields – assessment approach

Submitter ID numbers

S-94956774, S-94995477, S-94965456, S-94995477, S-94996976

Summary of issues

Submitters expressed concerns regarding the potential impacts of electric and magnetic fields (EMF) on residential properties, including perceived health effects such as increased cancer risk for residents living near high-voltage transmission lines. Submitters commented on the assessment of electric and magnetic fields for the project. Specific comments included:

- a request for more information on the minimum and maximum voltages across Pokolbin Mountains and Broken Back Mountain Trail exposure levels at residential properties and assessment on human health and animals
- a perception that the assessment downplays EMF exposure risks and does not consider relevant studies by Draper et al. (2005), Finkelstein (1998), Huss et al. (2021) that found associations with health risks.

Response

An EMF assessment was prepared to support the EIS for the project and was included as *Technical Report 17 – Electric and magnetic fields assessment* and summarised in *Chapter 21 (Hazards and risks)* in the EIS.

The EMF assessment (see *Technical Report 17 – Electric and magnetic fields assessment*) evaluated EMF levels for the proposed 500 kV double-circuit transmission line against the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) recommended International Commission on Non-Ionizing Radiation Protection (ICNIRP) public exposure guidelines. Potential impacts during operation are also discussed in the EIS (see *section 21.4.3* of the EIS).

Predicted magnetic and electric field level, both directly beneath the line and at nearby residential properties, are well below the ICNIRP limits for the general public under all operating scenarios. At

the edge of the easement, magnetic field levels would be similar to those produced by common household appliances.

Results show that the electric field levels directly under the line would be within 9.1 kilovolts per metre (kV/m), decreasing rapidly with distance. Modelled magnetic fields range from background levels at setback distances to values well below the ICNIRP general-public reference level of 2,000 mG, including under contingency (one-circuit-out) conditions. Where field levels are within ICNIRP guidelines, no adverse health effects are expected for humans or animals.

Commitment to compliance with the above-mentioned criteria is outlined in mitigation measures EMF1 and EMF2 (refer to *Appendix D (Updated mitigation measures)* of the Amendment Report.

The assessment also reviewed national and international scientific studies on EMF and health effects. Advice from the World Health Organization and ARPANSA indicates that current evidence does not show a causal link between extremely low-frequency EMF (such as that from transmission lines) and adverse health effects in humans, animals or plants. While some studies report associations, these are not supported consistently across the broader scientific literature.

A precautionary approach has been adopted through design measures such as maximising separation from dwellings where practicable, increasing minimum ground clearance, and using tower configurations that naturally reduce EMF levels. Compliance will be verified through field-strength measurements within 12 months of energisation.

Based on the assessment, the project would comply with all relevant Australian and international exposure standards, and no adverse effects on public health or the environment are anticipated. EnergyCo will continue to apply prudent-avoidance principles and engage with nearby landowners during detailed design to ensure EMF exposure remains as low as reasonably practicable.

5.17 Other matters

5.17.1 Economic – assessment approach

Submitter ID numbers

S-95073209

Summary of issues

A submitter expressed concerns regarding the economic assessment of the project, including a perception that it was inadequate and did not meet the SEARs due to:

- the absence of a standalone chapter on economic impact in the EIS
- lack significant primary data and use of an outdated black box methodology
- lack of consideration of impacts on local housing markets or cumulative impacts on local labour markets.

Response

An economic impact assessment was prepared to support the EIS for the project and was included as *Technical Report 19 – Economic impact assessment* and summarised in *Chapter 22 (Other matters)* of the EIS. The assessment provides a comprehensive evaluation of the economic impacts of the project in accordance with the SEARs. The assessment was prepared using input–output analysis consistent with recognised NSW and Australian Government methodologies for critical State significant infrastructure (CSSI). As such, the methodology used is not considered outdated. The analysis considered both direct and flow-on effects to the regional and State economies during construction and operation. The description of the regional economy is based on Australian Bureau of Statistics Census of Population and Housing data (2021) and information from the model of the regional economy developed for the input-output analysis. As such, the data used to inform the economic impact assessment is deemed appropriate.

Potential temporary demand for housing and services from the construction workforce was assessed in the social impact assessment (see *Chapter 14 (Social)* and *Technical Report 6 – Social impact assessment* of the EIS). It was further assessed as part of the *Appendix I (Social impact assessment addendum)* prepared to support the Amendment Report.

Section 6.4.2 of Technical Report 6 – Social impact assessment noted that the approach to including temporary worker accommodation facilities at construction support sites substantially reduces the potential demand of non-local workers to be accommodated in the project’s social localities, thereby minimising potential pressures on the local rental and short-term accommodation markets.

It was noted that short-term transitional pressures may arise during the establishment of the temporary worker accommodation facilities, with some non-local workers needing to secure local accommodation. Mitigation measures in relation to housing and accommodation would reduce the risk of diminished access to housing and short-term accommodation for other uses during the construction of the project. These measures include temporary worker accommodation management plans, which will include contemporary analysis of short-term and local accommodation capacities in key localities such as Broke, Millfield and Cooranbong, ongoing monitoring of housing availability, and updated workforce histograms. Additionally, mitigation measures have been updated and are outlined in the *Appendix D (Updated mitigation measures)* of the Amendment Report.

Section 9.4.1 of Technical Report 6 – Social impact assessment considers the potential for increased competition for labour and skills as a result of the overlapping timeframes of major projects in the Hunter region, including HTP. This assessment identified that there is the potential for skilled labour shortages, wage competition and potential increases in disparities within local and regional economies. Other projects that are anticipated to rely on similar labour pools include the New England REZ Transmission Project, the Hunter-Central Coast REZ Transmission Project and the HVO Continuation Projects. Competition and delays in securing the required workforce may contribute to project delays, increased non-local recruitment and associated costs. In order to manage potential cumulative impacts on local labour markets, a local business and employment strategy will be prepared and implemented (see mitigation measure S05 of the *Appendix D (Updated mitigation measures)* of the Amendment Report. This strategy will include mechanisms to monitor cumulative competition, as well as set targets for local employment and support investment into retraining and upskilling pathways for workers transitioning into renewable energy industries.

As outlined in the *section 22.4.6 in Chapter 22 (Other matters)* of the EIS the average annual economic direct and indirect output on the regional economy during construction of the project is anticipated to be \$325 million. The project is estimated to make up to \$27 million in annual direct and indirect output during operation in the regional economy. As outlined in the *section 14.7 in Chapter 14 (Social)* of the EIS the project's social and economic benefits would be realised in the short to medium term, in the form of construction-related employment, local business participation, regional supply chain opportunities and community benefit sharing. Further social value would be delivered during operation through increased energy reliability, improved transmission network performance, and a more sustainable energy future.

EnergyCo will continue to work with local councils, regional stakeholders and local businesses to identify opportunities for procurement, training and employment consistent with its regional engagement commitments (see *Chapter 6 (Engagement)* of the EIS) and *Chapter 4 (Engagement)* of this Submissions Report.

5.17.2 Economic – impacts to local businesses and tourism

Submitter ID numbers

S-92240456, S-93580456, S-94697206, S-94770457, S-94879975, S-94958737, S-94965494, S-95004721, S-95013210, S-95023957, S-95028957, S-94697206, S-94770457, S-95028957, S-95104707

Summary of issues

Submitters were concerned about the economic impacts of the project on local businesses and tourism, including:

- loss of income for businesses on Pokolbin Mountains Road and Broken Back Road from project related disruptions and restrictions in access, including boutique accommodation and wineries
- impacts on local businesses and the tourism economy in the Hunter Valley (particularly near Millfield and Pokolbin) from changes to amenity including wineries and cellar doors, local photographers, eco-tourism businesses and outdoor recreation businesses
- the need for compensation and support for local businesses including tourist accommodation that experience loss of income from project impacts such as access restrictions
- economic impacts on Hunter Valley Gliding Club due to impacts on Warkworth Aerodrome due to waning membership caused by the project.

Response

Local business and tourism considerations were primarily addressed as part of the social impact assessment (see *Chapter 14 (Social)* of the EIS and *Technical Report 6 – Social impact assessment* of the EIS). This assessment considered potential effects on local amenity, visitor experience, and tourism-related enterprises located along scenic routes such as Pokolbin Mountains Road, Mount View Road and within the Millfield area. An addendum social impact assessment has also been prepared to assess the amended project and to consider updates to the *Social impact assessment Guideline for State Significant Projects* (DPHI 2025).

Section 6.5.6 of *Technical Report 6 – Social impact assessment* of the EIS outlines the potential impacts of the project on tourism operation and the visitor economy. It is noted that construction activities in high-tourism areas such as the Hunter wine region may affect the visitor experience due to increased traffic and visual impacts in certain areas. Increased construction noise, visual disturbances, road detours and congestion may also deter visitors from engaging in wine tourism, eco-tourism and cultural heritage experiences. Roads that traverse the Hunter Valley wine region that would be used for construction include Wine Country Drive, Broke Road, McDonalds Road and the lower portion of Pokolbin Mountains Road. Upgrades and minor works would also be required for some of these roads. Related social impacts, including reduced access to short-term accommodation and changed access to recreational infrastructure, are considered in the context of the project's potential effects on tourism operations and the visitor economy.

EnergyCo also acknowledges concerns raised regarding potential business disruption and the need for support for local businesses. As it is outlined in *Technical Report 6 – Social impact assessment*, the project would result in a permanent change in the visual landscape during operation, affecting residents' and visitors' experiences of rural, natural and cultural surroundings. While impacts are anticipated (refer to *Technical Report 3 – Landscape character and visual impact assessment* to the EIS and *Appendix G (Landscape character and visual impact assessment addendum)* of the Amendment Report), section 7.3.1 of *Technical Report 6 – Social impact assessment* notes that tourism representatives acknowledged that, through the corridor planning process, EnergyCo had minimised impacts on the picturesque Hunter Valley wine and tourism region. It was also acknowledged by local community representatives that the placement of the towers below ridgelines (where possible) would reduce visual amenity impacts. To minimise long-term impacts on surroundings, EnergyCo will implement ongoing design refinements during detailed design (e.g. retention of vegetation buffers, reduced lighting) and implement a community communication strategy through mitigation measure S02, focusing on continued engagement with affected stakeholders to increase awareness of design refinements.

Appendix I (Social impact assessment addendum) of the Amendment Report outlines that there would be no change to the ratings for impacts on tourism operation and the visitor economy for the amended project. Although the addition of the temporary worker accommodation at the Wollombi Road construction support site would result in negative visual impacts, the removal of the temporary worker accommodation at the Gouldsville Road construction support site would reduce workforce presence in surrounding towns, and impacts on picnic areas in State forests would be reduced as a result of access track changes, these changes to impacts would not result in changes to the overall impact ratings.

EnergyCo will minimise impacts on local businesses and the tourism sector through mitigation measure S01 (social impact management plan), mitigation measure S02 (community communication strategy), mitigation measure S05 (local business and employment strategy), which includes support for local businesses such as maintaining a local and regional supplier database and mechanisms to monitor changes to community access to key goods and services, and the implementation of visual, noise, air quality and traffic mitigation measures near key visitor attractions, including mitigation measures LV1–LV3, NV1, AQ1–AQ3, and TT1 (refer to *Appendix D (Updated mitigation measures)* of the Amendment Report)

Further impacts in relation to access management have been considered in *Appendix H (Revised traffic and transport impact assessment of the Amendment Report (see section 5.3.11))*. Property access management measures will be developed further in consultation with landowners along this road during construction planning as outlined in the mitigation measure TT1 of the *Appendix D (Updated mitigation measures)* of the Amendment Report. A new mitigation measure (TT14) was introduced to further respond to impacts to property access impacts for properties located along Pokolbin Mountains Road, parts of Mount View Road and Mount Baker Road.

5.17.3 Economic – job creation

Submitter ID numbers

S-94335013, S-94573984

Summary of issues

Submitters expressed that the jobs created from the project would be a notable benefit to the Hunter Valley region.

Response

EnergyCo acknowledges the support for the project.

Benefits to local businesses would be facilitated through the implementation of mitigation measure S05 (local business and employment strategy), which will include initiatives such as setting targets for local employment, prioritising local procurement and contractor engagement, and partnering with Business Hunter and Local Chambers of Commerce to promote procurement opportunities.

5.17.4 Air quality – general impacts

Submitter ID numbers

S-94320457, S-94410706, S-94697206, S-94770457, S-94965456, S-94965556, S-95004721, S-95028957, S-95105488, S-95106969, S-95108971

Summary of issue

Submitters expressed concerns regarding the lack of assessment of potential dust impacts for nearby commercial and residential receivers along Pokolbin Mountains Road and Broken Back Road in the air quality assessment. Specific concerns raised were in relation to lack of:

- identification of Pokolbin Mountains Road as a potential track-out location near the transition of the asphalt wearing course to the start of the dirt road in accordance with the IAQM
- consideration of dust generated from use of the unsealed portion of Pokolbin Mountains Road or from the upgrade of various sections of Pokolbin Mountains Road and Broken Back Road
- consideration of dust impacts on businesses, vineyards, residences (including roof drinking water sources), livestock drinking water sources (including Foxy Gully, Muggyrang Creek and farm dams) or public recreational use areas (such as the Great North Walk) near Pokolbin Mountains Road.

Submitters expressed concerns regarding the dust generated from construction, including dust from construction impacting nearby residences and children of Millfield Public School and resulting in associated health impacts

Response

An air quality and greenhouse gas assessment was prepared to support the EIS for the project and was included as *Technical Report 18 – Air quality and greenhouse gas impact assessment* of the EIS and summarised in *Chapter 22 (Other matters)* of the EIS.

The air quality assessment (see *Technical Report 18 – Air quality and greenhouse gas impact assessment*) evaluated potential impacts from dust and vehicle emissions during construction of the project. The assessment followed the *Guidance on the Assessment of Dust from Demolition and Construction*, which uses a risk-based method to consider amenity, health and ecological effects (IAQM 2024).

As part of the Amendment Report, a screening assessment has been carried out as part of the construction dust assessment. There are a total of 75 human receivers within 250 metres of the amended project impact area (compared to 31 human receivers for the exhibited project impact area). These 75 human receivers include 61 residential receivers, eight commercial receivers, one utility receiver, and six recreational receivers.

The project elements carried forward to the detailed construction dust assessment based on the initial screening in line with IAQM guidance for the amended project based on their proximity to human or ecological receivers (within 250 metres and 50 metres respectively) align with those carried forward to the detailed assessment as part of the exhibited EIS. Road upgrades of unsealed roads have been included alongside access tracks as part of the Amendment Report as these were excluded from the exhibited assessment in error.

The unmitigated and mitigated dust risks presented as part of the amendment are consistent with the ratings outlined in the EIS.

The assessment found that the risk of dust amenity (dust soiling), health and ecological impacts prior to mitigation ranged from low to medium for earthworks, construction and track-out activities. With consideration of mitigation, the residual impacts would be not significant. This outcome reflects both the effectiveness of the mitigation measures and the limited number of air quality sensitive receivers located within the IAQM assessment distances.

The Hayes Road laydown area is approximately 600 metres from the Millfield Public School. Dust impacts were assessed for sensitive receivers within 250 metres of this laydown area. According to IAQM guidance, dust impacts from construction activities, including track out from construction vehicles of dust onto roads, beyond this distance are considered to be negligible. As such, dust impacts at Millfield Public School from activities at the Hayes Road laydown area are anticipated to be negligible. Notwithstanding, management measures AQ1, AQ2, AQ4 will be implemented to minimise the risk of dust impacts from this site at nearby receptors like Millfield Public School.

The proposed measures (see *section 22.1.5* of the EIS) are considered sufficient to minimise dust generation and avoid adverse health or amenity impacts on nearby residents (including roof drinking water sources), schools and other sensitive receivers.

However, a new mitigation measure AQ5 has been introduced as part of the Amendment Report to address dust generation near vineyards, as outlined in *section 5.17.4, Chapter 5 (Assessment of impacts)* of the Amendment Report.

5.17.5 Air quality – management and mitigation

Submitter ID numbers

S-94697206, S-94770457, S-94956774, S-95028957, S-95104707, S-95105488, S-95108971

Summary of issues

Submitters raised suggestions to minimise and manage dust impacts from the project. Specific suggestions raised were in relation to:

- minimising dust generated from use of unsealed roads by construction vehicles through sealing them with bitumen and applying water sprays
- preparation of a construction air quality management plan informed by consultation with nearby residents
- the need for regular dust monitoring near residences with publishing of results.

Response

A construction air quality management plan (CAQMP) would be prepared by a suitably qualified and experienced person and will include appropriate measures to mitigate the risk of air quality impacts from the project during construction (refer to mitigation measure AQ1).

CAQMP will be prepared as part of the construction environmental management plan. The CAQMP will incorporate the mitigation measures recommended in the technical assessment and will be implemented by the construction contractor. Measures will include but not limited to:

- maintaining exposed and unsealed areas in a moist condition during dry or windy weather
- applying water to roads, stockpiles and cleared areas as required
- covering vehicles transporting spoil or materials to prevent dust escape
- shade cloth barriers with site fences around sensitive receiver locations close to potentially dusty activities, such as excavation and material stockpiles, will be used where practicable
- undertaking routine inspections, recording exceptional dust events, and responding to community complaints in accordance with the project's environmental incident procedure.

In addition, prior to the commencement of construction and earthworks activities, appropriate communications will be developed to notify potentially impacted residences of nearby works (including the type of works and their likely duration) and relevant contact details for environmental complaints reporting will be provided (refer to mitigation measure AQ2).

Monitoring activities for dust and air quality impacts during construction will include the recording of any exceptional incidents that cause dust and/or air quality impacts and the action taken to resolve them, inspection of access roads for integrity and to inform any necessary repairs to the surface (and recording of the inspection of construction routes in a site register), and maintaining a complaints register.

The project does not propose to seal any unsealed roads. EnergyCo acknowledges that unsealed road surfaces have a higher potential for dust generation, particularly under dry conditions or during high winds, which may affect nearby sensitive receivers.

An updated list of mitigation measures is outlined in *Appendix D (Updated mitigation measures)* of the Amendment Report. Mitigation measures will be implemented to minimise dust risks on nearby human and ecological receivers, including the use of a water cart or sprays (mitigation measures AQ2 and AQ5) to ensure that exposed areas are kept moist where necessary and practical.

5.17.6 Waste management

Submitter ID numbers

S-94876957, S-94924208

Summary of issues

Submitters commented on the waste management approach for the project. Specific comments raised were in relation to:

- concern regarding lack of information or a clear strategy or measurable actions to incorporate circular economy principles, such as reuse, recycling, and sustainable material sourcing
- concern regarding lack of quantification of how many tonnes of waste will be generated by material type
- concern regarding vague statements about minimising landfill waste, with no mechanisms for measurement, tracking, or auditing
- a perceived missed opportunity to promote use of sustainable materials such as use of recycled plastic fence posts or local renewable fuels such as biodiesel
- the need for construction by-products to be viewed as resources rather than waste
- whether the cleared timber from construction activities would be provided to Forestry.

Response

As described in *section 22.3, Chapter 22 (Waste)* of the EIS, waste generated by the project would be managed in accordance with the waste hierarchy of avoid, reduce, reuse and recycle before disposal is considered. The project will prepare a waste management and resource recovery plan (WMRRP) to ensure materials are handled, tracked and reported consistently with the *NSW Protection of the Environment Operations Act 1997* and *NSW Waste Avoidance and Resource Recovery Strategy*. *Table 22.12* of the EIS quantifies estimated waste volumes by material type for construction, which will be refined through the WMRRP.

During construction, usable timber and vegetation cleared within the disturbance area would be managed to maximise reuse and resource recovery. Usable timber would be reused for fauna habitat, where feasible, or, where practical, offered to directly affected landowners, including the FCNSW. Engagement with the Forestry Corporation of NSW is ongoing, including discussions surrounding the impacts to land use and opportunities for timber to be suitably harvested during construction for the commercial market.

Clean green waste (free of weeds and weed seeds) would be chipped, mulched and reused on-site, in accordance with the NSW EPA *Resource Recovery Orders and Exemptions* such as *The Mulch Order 2016*. Weed-contaminated material would be transported to a licensed facility for lawful disposal in accordance with the *Biosecurity Act 2015*.

A WMRRP will be prepared prior to construction of the HTP (see *Appendix D (Updated mitigation measures)* of the Amendment Report). The plan will establish measurable targets for waste reduction, recycling and diversion from landfill, and will identify opportunities to incorporate recycled and low-impact materials (such as recycled aggregates, steel and fencing products) into design and procurement. Opportunities to use low-emission fuels such as biodiesel will also be explored where feasible. EnergyCo will continue to engage with the NSW DCCEEW and relevant local councils to ensure waste minimisation and resource recovery opportunities are maximised throughout delivery of the project.

5.17.7 Climate change and greenhouse gas

Submitter ID numbers

S-94983464

Summary of issues

A submitter raised concern regarding perceived lack of consideration of the project's contribution to greenhouse gas emissions and climate change as well as opportunities to achieve net zero carbon emissions and the need for carbon offsets.

Response

An air quality and greenhouse gas assessment was prepared to support the EIS for the project and was included as *Technical Report 18 – Air quality and greenhouse gas impact assessment* and summarised in *Chapter 22 (Other matters)* of the EIS.

The *Technical Report 18 – Air quality and greenhouse gas impact assessment* and *Chapter 22.2 (Greenhouse gas)* of the EIS include a quantitative assessment of GHG emissions associated with the construction and operation of the project. This estimate was updated as part of the Amendment Report (refer to *section 5.18.3* of the Amendment Report). Total estimated emissions are around 650,000 tonnes CO₂-e per year during construction and about 1026 tonnes CO₂-e per year of operation (see *section 5.18.3* of the Amendment Report). Approximately 23.5 per cent of the construction total is attributable to native vegetation clearing.

The assessment followed the NSW EPA Guide for Large Emitters and the National Greenhouse Accounts Factors workbook and determined that:

- annual emissions during construction would exceed the 25 000 tonnes CO₂-e reporting threshold but would remain well below the thresholds for classification as a large emitter.
- operational emissions would remain below the reporting threshold in all years.

EnergyCo is committed to managing and reducing project-related emissions (see *section 22.2.5* of the EIS). Opportunities to minimise Scope 1 and 2 emissions include:

- using energy-efficient equipment and machinery

- optimising construction scheduling to reduce fuel use
- implementing energy-management training and procurement of low-carbon materials where practicable.

Once operational, the HTP would facilitate the reduction of GHG emissions across NSW by enabling the connection and delivery of renewable energy generated within the Central-West Orana and New England REZs to the National Electricity Market (NEM). This contribution to decarbonising the electricity sector is expected to far outweigh the project's construction emissions over its operating life.

Carbon offsets are not required under current NSW regulatory frameworks for linear transmission infrastructure. EnergyCo will continue to pursue feasible emissions-reduction and efficiency opportunities during detailed design and delivery in accordance with the commitments outlined in the EIS.

5.18 Cumulative impacts

5.18.1 Impact assessment approach

Submitter ID numbers

S-92282463, S-94900217, S-94983464, S-94995477, S-95104707

Summary of issues

Submitters raised concerns regarding the assessment of cumulative impacts as part of the EIS. Specific concerns raised were in relation to a perception that:

- the assessment of projects associated with renewable energy zones individually means cumulative impacts are not adequately accounted for
- the assessment of cumulative impacts does not consider impacts across disciplines or more broadly for a region
- the assessment is lacking detail and is considered insufficient.

Response

The cumulative impact assessment for the HTP was undertaken in accordance with the DPHI guideline *Cumulative Impact Assessment for State Significant Projects* (DPIE 2021) and is documented in *Chapter 23 (Cumulative impacts)* of the EIS. The assessment considered both issue-specific cumulative impacts (e.g. biodiversity, noise, land use, and social) and combined cumulative impacts, consistent with DPHI methodology. The cumulative impact assessment has revised to consider the proposed amendments and refinements, in addition to using updated project information and stakeholder feedback received through the EIS exhibition (refer to *section 5.20* of the Amendment Report).

The EIS identified and assessed cumulative interactions between the HTP and other major infrastructure projects (including renewable energy projects) within the cumulative impact assessment study area which conservatively included the LGAs that the project traverses, being Muswellbrook, Singleton, Cessnock, Central Coast and Lake Macquarie. This included screening of

relevant approved, proposed, and reasonably foreseeable projects, their interface with HTP (see *Table 23.2* of the EIS), consideration of their timing and spatial overlap (see *Table 23.3* of the EIS), and evaluation of combined environmental, social and economic effects at both local and regional scales.

The cumulative assessment concluded that, while there would be overlapping construction activities from regional infrastructure delivery, the incremental contribution of the HTP to regional cumulative effects is expected to be limited due to the linear nature of the project, its distribution across multiple landscapes, and the application of standard mitigation measures and coordination mechanisms with other proponents. EnergyCo continues to engage with Transgrid, local councils and other delivery agencies to coordinate regional infrastructure planning and minimise cumulative construction impacts where practicable.

However, in response to feedback from TfNSW concerning cumulative impacts from construction traffic on highways within the study area, a cumulative impact assessment was completed for the New England Highway and Golden Highway. This was inclusive of renewable energy projects located outside the study area but may use these roads. The cumulative assessment found that the majority of the highway intersections would continue to perform at a similar level of service. Where intersections are forecast to deteriorate in the cumulative scenario, limitations on the use of these intersections by the project have been identified in the revised mitigation measures. Refer to *section 5.20* of the Amendment Report for further detail.

Appendix D (Updated mitigation measures) of the Amendment Report introduces new mitigation measures to manage traffic impacts associated with other projects considered by cumulative assessment including mitigation measure TT3 (intersection performance impacts), TT11 (access interfaces with operations at HVO and Bulga mining complex), TT13 (interface with Lake Macquarie City Council's upgrade of the Martinsville Road/Freemans Drive intersection), and TT15 to coordinate works on or over the Golden Highway.

5.19 Justification and conclusion

5.19.1 Evaluation of benefits vs impacts

Submitter ID numbers

S-92240456, S-92282463, S-92343210, S-92611207, S-93344456, S-93457210, S-93767207, S-94193709, S-94198717, S-94668223, S-94839461, S-94839725, S-94879975, S-94965456, S-94965494, S-94965781, S-94995477, S-95004721, S-95097206, S-95108231, S-95111215, S-95111958, S-95114463, S-95114715, S-95114723, S-95119217, S-95119224, S-95121456, S-95121478

Summary of issues

Submitters provided commentary of the project based on their perception of whether the benefits outweighed the impacts. Specific comments raised were in relation to:

- acknowledgement of the need for transmission projects to enable the transition to renewable energy and deliver the Electricity Infrastructure Roadmap and Integrated System Plan

- support for the project's role in supporting a cost-effective, reliable and timely transition to renewable energy and mitigating climate change impacts and that these benefits outweigh local impacts
- perception that the project is for the greater good and justified as landowners will be compensated for their inconvenience
- perception that the project is not justified as its benefits do not outweigh the impacts on rural and regional communities, biodiversity impacts and economic costs
- perception that the project prioritises short-term convenience over long-term impacts
- perception that the project is not necessary and so the impacts are not considered justified
- perception that the project impacts landowners for little public benefit.

Response

Detailed information regarding the need for the project was provided in *Chapter 2 (Strategic context)* of the EIS.

As the remaining coal-fired power stations close, the HTP is critical for energy security in NSW. To maintain the energy supply to the Hunter, Sydney and Illawarra regions, 500 kV transmission connections are required between Bannaby substation in Marulan south of Sydney and Bayswater Power Station in Liddell in the Upper Hunter Valley. These 500 kV transmission connections and existing 500 kV transmission lines in NSW are referred to as the '500 kV Ring' (refer to *Figure 1.1* in the EIS). The HTP would close the northern gap of the 500 kV Ring, connecting Bayswater to a new switching station in the Olney State Forest near Eraring.

Both the NSW Government and the Australian Government recognise the strategic importance of the project and require it to be built as quickly as possible and in a way that minimises impacts to people and the environment.

The HTP is critical to unlocking the generation capacity of the Central-West Orana and New England REZs, and:

- is an urgent NSW Actionable Project under the AEMO's *2024 Integrated System Plan* for the transition of the National Electricity Market (NEM) to renewable energy over the next 20 years
- would receive part of the \$4.7 billion allocated to the NSW Government to modernise the electricity grid under the Australian Government's Rewiring the Nation program
- is a 'Deliver Now' project under the *Network Infrastructure Strategy* (EnergyCo 2023a) to support the delivery of the NSW *Electricity Infrastructure Roadmap* (the Roadmap)
- is a Priority Network Infrastructure Project (PNIP) under the NSW *Electricity Infrastructure Investment Act 2020* (EII Act) because it is essential for energy security and avoiding breaches of the NSW Energy Security Target.

The project has been developed following a robust and iterative process that has involved substantial alternatives and options analysis, environmental impact assessment and stakeholder engagement. Where feasible and reasonable, the project has aimed to avoid and minimise impacts to people and the environment. This has included refining the project to reduce and balance impacts to private landowners, communities, biodiversity, recreation areas, and heritage.

However, given the nature and scale of the project, unavoidable impacts remain including impacts to biodiversity from vegetation clearing, heritage from ground disturbance during construction, landscape and visual impacts at public and private viewpoints, traffic and transport impacts associated with the movement of construction vehicles, and land use and property impacts.

The project includes a range of mitigation and management measures to reduce the likelihood, magnitude and consequences of residual impacts. The design and construction methodology for the project would also be refined with the objective of further avoiding and minimising potential impacts on people and the environment.

Not proceeding with the project would reduce the security of electricity supply in NSW. It would also discourage investment in renewable energy generation and storage within the emerging REZs. The provision of appropriate infrastructure to these zones is required to allow the adoption of new renewable technologies in the future, which is required to support the delivery of commitments and policies at a NSW Government, Australian Government and international level, particularly the commitment for Net Zero.

Overall, the HTP is a critical component in strengthening the supply of clean and reliable electricity to consumers and delivering long-term benefits to the NEM. On balance, it is considered that the strategic need and benefits of the project outweigh the mitigated project impacts and, therefore, the HTP is justified and is in the public interest.

Further details regarding the justification of the HTP is provided in *Chapter 25 (Justification of the project)* of the EIS and *Chapter 7 (Justification of the amended project)* of the Amendment Report.

5.19.2 Project costs and value for money

Submitter ID numbers

S-92240456, S-94965781, S-94983464, S-94995477

Summary of issues

Submitters commented on the economic assessment of the proposal and value for money considerations, including that they wanted:

- more transparency regarding project capital costs to inform assessment on whether the predicted benefits justify the costs and if the project provides value for money
- a clear cost-benefit analysis of project options, including consideration of biodiversity loss, climate change impacts, and resilience, to ensure genuine evaluation of alternatives
- accurate and realistic project costing as there is concern that the costs may be underestimated.

Response

Cost-benefit analysis

Both the Australian Government and the NSW Government have endorsed the transition from fossil fuels to renewable energy, implementing supporting policies, plans and frameworks to support the transition. A cost-benefit analysis was therefore not required within the established framework, as economists employ cost-benefit analysis to ascertain whether the benefits to the community outweigh the costs, ensuring economic efficiency.

The project aligns with the initiatives and serves as a crucial component of the infrastructure needed to meet the Australian Government and NSW Government renewable energy transition vision. Given the overarching policy, direction and objectives, the SEARs for the project from NSW DPHI do not require the preparation of a cost-benefit analysis.

Consideration of cost

Chapter 3 (Alternatives and options) of the EIS provided a detailed description of the alternatives considered for the HTP. The alternatives analysis followed a holistic, multi-criteria assessment that included consideration of cost.

Corridor alternatives were identified based on EnergyCo's planning pillars and project objectives developed specifically for the HTP. EnergyCo's key planning pillars guide the corridor selection process for its projects in NSW. These pillars and principles align with the requirements of the *NSW Electricity Infrastructure Investment Act 2020* and were presented in *Table 3.3* of the EIS. The 'economic' planning pillar is defined as 'the cost of the option and its impacts on key industries' and its corresponding planning principle (among others) is to 'deliver energy infrastructure that is in the long-term financial interests of energy consumers'.

EnergyCo's project objectives included (among others) to 'deliver the project on time at reasonable cost for consumers' (refer to *section 3.3* of the EIS).

Transmission alignment alternatives were also assessed using the project objectives and additional economic considerations (among others) (refer to *Table 3.6* of the EIS). An example of how cost considerations influenced the assessment of alignment alternatives was the assessment of Alignment A, B and C within route option South A. Alignment B was discounted based on several considerations, one of them being cost as it was the longest and therefore most expensive alignment alternative (refer to *Table 3.8* of the EIS).

Avoidance and minimisation of biodiversity impacts (which correlates to a reduced biodiversity offset liability) was a key consideration in the alternatives and options analysis (refer to *section 5.1.2* of this Submissions Report). There would be unavoidable impacts to biodiversity, however, these impacts are required to be offset financially per the *NSW Biodiversity Conservation Act 2016* (BC Act).

EnergyCo will enter into a SODA with the Secretary of the NSW DCCEE for the HTP. Under this agreement, responsibility for delivering biodiversity offsets will be transferred to NSW DCCEE with commensurate funding from EnergyCo.

Economic impact assessment

Detailed information regarding the economic impacts of the project was provided in *Chapter 22 (Other matters)* with further detail provided in *Technical Report 19 – Economic impact assessment* of the EIS. The economic impact assessment provided an assessment of the potential economic impacts (both positive and negative) during construction and operation the project (expenditure, workforce generation, cost of land displacement etc). As discussed above, a cost-benefit analysis was not included in the economic impact assessment for the HTP.

Capital cost

The capital cost of the HTP is commercial in confidence however the required Estimated Development Cost has been provided to DPHI per the requirements of the EP&A Regulation.

5.19.3 Ecologically sustainable development principles

Submitter ID number

S-94983464

Summary of issues

The submitter perceived that the project fails to meet ecologically sustainable development (ESD) principles as it lacked appropriate application of the precautionary principle, particularly in relation to biodiversity impacts and the need to secure adequate biodiversity offsets and conservation measures in advance of project approval.

Response

Consideration of the principles of ecologically sustainable development and how they were considered in the design and environmental impact assessment of the HTP is provided in *Table 25.2* in *Chapter 25 (Justification of the project)* of the EIS and *Table 7-1* of *Chapter 7 (Justification of the amended project)* of the Amendment Report.

With regards to the precautionary principle, the environmental impact assessment for the project is consistent with accepted scientific and assessment methodologies and good practice, has considered relevant statutory and agency requirements, and has been informed by consultation with stakeholders including government agencies and the community.

The assessments have applied a conservative approach regarding the proposed construction and operation of the project, and the modelling used has been conservative (where relevant). This has included assessing worst-case impacts and scenarios including a project impact area that would be further refined during detailed design, and which is likely to result in fewer impacts than those identified. Mitigation and management measures have also been proposed to further avoid and minimise impacts on people and the environment.

Emphasis has been placed on avoiding serious or irreversible damage to the environment. This has included avoidance and minimisation of impacts to critically endangered ecological communities such as the Warkworth Sands woodland and Central Hunter Valley eucalyptus forest and woodland, and habitat of listed threatened species. A lack of full scientific certainty has not been used as a reason for postponing measures to prevent environmental degradation.

Biodiversity impacts have been estimated with a high degree of certainty in accordance with the Biodiversity Assessment Method (BAM) and detailed in the *Appendix E (Revised biodiversity development assessment report)* of the Amendment Report.

Impacts to biodiversity are required to be offset financially per the NSW *Biodiversity Conservation Act 2016* (BC Act). The estimated biodiversity credit liability requirements for the HTP have been calculated using the *Biodiversity Assessment Method Calculator* (BAM-C). The total credit liability was calculated at 234,725 in the EIS (refer to *Table 8.16*). This has been updated to include the proposed amendments and is currently estimated at 300,895 (refer to *section 11.1* of *Appendix D (Revised biodiversity development assessment report)* of the Amendment Report).

EnergyCo will enter into a SODA with the Secretary of the NSW DCCEEW for the HTP. Under this agreement, responsibility for delivering biodiversity offsets will be transferred to NSW DCCEEW with commensurate funding from EnergyCo, as detailed in *Appendix E (Revised biodiversity development assessment report)* of the Amendment Report. The SODA will be entered into after planning approval of the HTP, as per clause 6.3A(1) of the Biodiversity Conservation Regulation 2017.

5.20 Other

5.20.1 Issues beyond the scope of this EIS

Submitter ID numbers

S-94336959, S-94995477, S-95109456, S-95109472, S-95109962, S-95111206, S-95111221, S-95112715, S-95112956, S-95113956, S-95113962, S-95114223, S-95114706, S-95115222, S-95118467, S-95119211, S-95119227, S-95121462, S-95121469

Summary of issues

Submitters expressed concerns in relation to issues that are considered beyond the scope of this EIS, including those related to:

- the project's support for renewable energy infrastructure, which is viewed as economically and technically flawed, contributing to grid instability and energy insecurity and the justification of the project related to climate change
- distrust in EnergyCo and the project's governance, citing lack of transparency and oversight
- concerns about Transgrid's performance on past projects in relation to the environment and community
- claims of foreign influence, national security risks and unethical procurement practices.

Response

EnergyCo acknowledges the submissions received that raised broader matters not directly related to the environmental assessment of the HTP.

The justification for the project and its role within the NSW Electricity Infrastructure Roadmap are addressed in *Chapter 2 (Strategic context)*, in *Chapter 25 (Justification of the project)* of the EIS and *Chapter 7 (Justification of the amended project)* of the Amendment Report. The EIS addresses matters within the scope of the SEARs, matters relating to wider energy policy fall outside the scope of the EIS.

5.20.2 Opposition to the project

Submitter ID numbers

S-93543486, S-95064460, S-95113211, S-95114221

Summary of issues

Submitters voiced their objection to the project without any further explanation.

Response

EnergyCo acknowledges the position of these submissions.

6

Response to organisation submissions

6 Response to organisation submissions

This section outlines the issues raised in submissions from special interest groups and organisations and provides responses. The issues raised in these submissions have been summarised and grouped generally under the same issues categories as the public submissions.

6.1 Birdlife Australia

Birdlife Australia provided a submission in response to the public exhibition of the EIS. The submission outlined general concerns with impacts to key threatened bird species and associated offsets to address residual impacts to these species. This section provides a summary of the issues raised and consideration of those issues.

6.1.1 Biodiversity

General biodiversity impacts

Summary of issue

Birdlife Australia noted consultation undertaken with EnergyCo during project development. Concerns were raised regarding impacts to the Regent Honeyeater and Swift Parrot. While welcoming measures detailed in the EIS undertaken to avoid high value habitat of key threatened species, Birdlife Australia raised concerns that the inclusion of the wording ‘minimised to the greatest extent practicable’ weakens the commitment to avoidance and introduces ambiguity that may undermine conservation outcomes against species with potential serious and irreversible impacts (SAIL). Furthermore, Birdlife Australia raised concerns regarding the residual impacts to key threatened bird species including the Regent Honeyeater, Gang-gang Cockatoo, South-eastern Glossy Black-Cockatoo and Swift Parrot.

Response

EnergyCo acknowledges Birdlife Australia’s involvement in consultation during project development as outlined in *section 3.7 of Appendix D (Community engagement outcomes)* of the EIS.

As outlined in *section 7.1.4.4 of Technical Report 1 – Biodiversity development assessment report*, the preferred transmission line corridor option adopted in the Singleton Military Area had the least impact to mapped important habitat for the Regent Honeyeater and Swift Parrot (with avoidance of more than 10 hectares of important habitat) as it is co-located with existing transmission lines. Despite this, it is acknowledged that not all habitat would be avoided by the project.

Appendix E (Revised biodiversity development assessment report) of the Amendment Report concluded that the amended project may result in a residual direct impact on habitat of up to 96.91 hectares for the Regent Honeyeater, 41.71 hectares for the Gang-gang Cockatoo, 18.52 hectares for the South-eastern Glossy Black-Cockatoo and 45.32 hectares for the Swift Parrot. Additional impact assessment provisions for threatened fauna species at risk of a SAll outcome were provided in *Appendix E (Revised biodiversity development assessment report)* of the Amendment Report for Regent Honeyeater (*section 9.1.3.1*) and Swift Parrot (*section 9.1.3.4*).

The calculations in this assessment used an amended disturbance area that was based on the project concept design. The use of a disturbance area was to provide a more accurate estimation of the likely magnitude of vegetation clearance required and the associated biodiversity impacts compared to the project impact area as described in *section 7.3, Chapter 7 (Approach to assessment)* of the EIS. It is expected that the detailed design and final construction methodology for the project would result in biodiversity impacts that are similar or less than those indicated in the EIS. This is because the detailed design will continue to refine and reduce the disturbance area for the project, for example through the micro-siting of transmission towers and the further exclusion of sensitive biodiversity areas (such as habitat for SAll entities).

The requirements to further avoid and minimise impacts on threatened bird species are captured in several mitigation and management measures as outlined in *Appendix D (Updated mitigation measures)* of the Amendment Report, particularly:

- mitigation measure B2, which requires the project to continue to be refined with the aim to avoid or minimise impacts on Regent Honeyeater and Swift Parrot important areas
- mitigation measure B6, which requires a supplementary hollow and nest strategy to be developed and implemented for the installation of nest boxes or other hollow creation method to provide alternative roosting and/or nesting habitat for threatened fauna (including Gang-gang Cockatoo, Glossy Black-Cockatoo and Swift Parrot) displaced during clearing
- mitigation measure B13, which requires installation of bird diverters at appropriate locations to reduce impacts on aerial fauna species (including Regent Honeyeater and Swift Parrot) from collision with transmission lines and infrastructure
- mitigation measure B18, which requires lighting designs to be in accordance with the *National Light Pollution Guidelines for Wildlife* (Commonwealth DCCEW 2023), which is relevant for Regent Honeyeater and Swift Parrot.

Biodiversity offsets

Summary of issue

Birdlife Australia raised concerns with the need for offsets to be adequately scrutinised, particularly for impacts to the Regent Honeyeater and Swift Parrot. The submission recommended that offsets provided are specific to affected populations, are like-for-like, and are subject to ongoing monitoring and assessment to confirm effectiveness.

Specifically, Birdlife Australia recommended that offsets are considered for the Tomalpin Woodlands, south of Kurri Kurri, which according to the submission, comprise key habitat for the Regent Honeyeaters and Swift Parrots. The submission stated that the Tomalpin Woodlands is recognised as one of the most important breeding sites for the Regent Honeyeater. Birdlife Australia noted moreover that the Tomalpin Woodlands comprise high value breeding habitat for the Swift Parrot as well as constituting habitat for numerous other threatened flora and fauna. Birdlife Australia recommended that certain large allotments of privately owned land which house key habitat for these species be targeted for offsets.

Response

As described in *section 5.5.5, Chapter 5 (Response to community submissions)* of this Submissions Report, EnergyCo will enter into a Strategic Offset Delivery Agreement (SODA) with the NSW Department of Climate Change, Energy, the Environment and Water (DCCEEW) who would have the responsibility for delivering biodiversity offsets for the project in accordance with the Hunter Region Conservation Investment Strategy (CIS). Should the project be approved, the details of the SODA will be provided on the NSW DCCEEW website.

The CIS includes opportunities to consolidate high value vegetation in protected areas include lands around Werakata National Park and State Conservation Area, of which the Tomalpin Woodlands are a component for consideration.

The CIS recognises the importance to secure regionally significant habitats for the Regent Honeyeater and Swift Parrot as a conservation priority (refer to *section 2.3* of the CIS).

The CIS also recognises the need to work with organisations such as Birdlife Australia, as well as landowners, to encourage activities that could contribute to Hunter region conservation priorities. Additionally, the CIS provides an example of the 5-year funding program for revegetation projects for Regent Honeyeaters and Swift Parrots on farms.

6.2 The Biodiversity Council

The Biodiversity Council provided a submission in response to the public exhibition of the EIS (23 September 2025). The submission outlined concerns with respect to how biodiversity values were considered in the project corridor selection process. The submission raised additional concerns regarding impacts to the Littlejohn's Tree Frog and recommended alternatives to avoid all impacts to this threatened species. This section provides a summary of the issues raised and consideration of those issues.

6.2.1 Alternatives and options

Selection of the preferred route option

Summary of issue

The Biodiversity Council expressed concern that the biodiversity considerations appear to have been given less weight in the route selection process compared to social and economic values. Specifically, the Biodiversity Council raised concern that the preferred route was chosen to avoid

impacts to private landowners and visual amenity impacts over ecological values. The Biodiversity Council raises concern about the application of the tiered hierarchy of constraints. The EIS categorises nationally-listed threatened species and ecological communities as Tier 2 constraints, areas to be “avoided where possible”, rather than as Tier 1 – priority areas to avoid.

Additionally, biodiversity protection was not a standalone strategic objective in the EIS but was instead grouped under a broader principle of minimising land use and environmental impacts. There is also a noted inconsistency between the EIS and *Technical Report 1 – Biodiversity development assessment report* of the EIS regarding how biodiversity constraints were classified and addressed, e.g. while the EIS categorises nationally-listed threatened species as areas to be avoided where possible, *Technical Report 1 – Biodiversity development assessment report* of the EIS treats them as values where impacts should be minimised.

The Biodiversity Council recommends undertaking a multi-criteria decision analysis to quantify the different social, economic and environmental values associated with each of the route options. This approach would provide transparency by clearly presenting the advantages and disadvantages of each option.

Response

Approach to selecting the preferred route

The approach to selecting the preferred route for the project was described in *Chapter 3 (Alternatives and options)* of the EIS and in *section 5.1.1 and section 5.1.2, Chapter 5 (Response to community submissions)* of this Submissions Report.

As discussed above, corridor alternatives were identified based on EnergyCo’s planning pillars and project objectives developed specifically for the HTP. The ‘environment’ planning pillar is defined as ‘impacts to natural and cultural environments’ and its corresponding planning principle (among others) is to ‘minimise negative impacts on biodiversity values’. EnergyCo’s project objectives were to ‘minimise significant land use conflicts and impacts on people and environment’ (refer to *section 3.3* of the EIS).

Three strategic corridors were selected (North, Central, South) with 19 route options identified and assessed, as outlined in *section 3.3* of the EIS. Route option South A was selected as the preferred route for the HTP.

The advantages and disadvantages of Route option South A were outlined in *Table 3.5* of the EIS. EnergyCo acknowledged that a disadvantage of route option South A would be the introduction of new electricity transmission infrastructure through vegetated areas of State forests that would result in impacts on biodiversity – although less than route options North A and Central A which would impact TECs.

Three transmission alignment alternatives (Alignment A, B and C) within route option South A were then assessed using the project objectives and additional environmental considerations that included criteria to ‘minimise impacts on unique or sensitive biodiversity and cultural values and offset unavoidable biodiversity impacts’ (refer to *Table 3.6* of the EIS). Alignment A was identified as the preferred alignment for the HTP.

In response to early community feedback and further technical and environmental investigations, several adaptations and improvements were made to the preferred alignment for the HTP. This

included moving the southern switching station from Eraring Power Station to the site of an old commercial timber plantation in Olney State Forest, where it no longer traversed Jilliby State Conservation Area.

Avoidance of high conservation areas and other biodiversity values

High conservation value areas such as Watagans National Park, Werakata National Park, Warrawolong Flora Reserve and existing biodiversity offset areas associated with the Bulga mining complex were avoided, as discussed in *section 3.3* and *section 8.2, Chapter 8 (Biodiversity)* of the EIS. In addition, the better-quality remnants of TECs were avoided that provide habitat for threatened species and important habitat for the Regent Honeyeater and Swift Parrot.

Following the selection of a preferred alignment, an iterative design process based on field survey results was undertaken to further avoid and minimise the project's impacts on biodiversity, in accordance with the requirements of the NSW *Biodiversity Conservation Act 2016* (BC Act), as outlined in *section 3.6* and *section 8.2* of the EIS.

With the refinement of the project design the following additional considerations were incorporated into the transmission line alignment and project assessment, as outlined in *Chapter 8 (Biodiversity)* with further detail provided in *Technical Report 1 - Biodiversity development assessment report* of the EIS:

- co-location – placing sections of the transmission line alongside existing infrastructure or in disturbed areas, such as mining sites, forestry operations or cleared lands, where native vegetation and habitat quality are low
- relocation – adjusting the alignment to avoid impacts on threatened species and communities and known populations of serious and irreversible impact species, including the Brush-tailed Rock Wallaby, microbats and threatened flora habitats
- partial clearing – implementing controlled vegetation clearing within and adjacent to the transmission line easement, focusing only on vegetation taller than two metres
- spanning and retention of forested gullies – reducing the extent of clearing within the State forests by spanning steep ravines and valleys where adequate conductor clearance can be achieved
- access – using existing access tracks where possible to minimise additional vegetation clearing and minimising construction of new access tracks.

Further avoidance and minimisation of biodiversity impacts will occur through micro-siting, which involves adjustment of project features during detailed design to avoid areas with high biodiversity value, including the minor relocation of project elements such as transmission towers and temporary construction infrastructure (construction support sites, laydown areas and access tracks). Commitments to micro-siting are reflected in mitigation measures B2 (focusing on avoiding areas of TECs, habitat for threatened species and SAI entities) and B4 (focusing on minimising vegetation clearing and disturbance of watercourses) outlined in the *Appendix D (Updated mitigation measures)* of the Amendment Report.

Alternatives to avoid impacts to Littlejohn's Tree Frog

Summary of issue

The Biodiversity Council expressed concern about the project's impact on the Watagans Mountain's population of the Littlejohn's Tree Frog and the accuracy of impacts assessed in the EIS and *Technical Report 1 – Biodiversity development assessment report*. The Biodiversity Council stated that proposed transmission towers and the construction of the Olney switching station would impact the connectivity of an already fragmented population of the Littlejohn's Tree Frog. This was also noted to include the direct disturbance of known artificial ponds and breeding sites that comprise critical habitat and repopulation sites for the species. The Biodiversity Council noted that offsetting the residual impacts of 63.53 ha of clearing, or the potential translocation of the species, is not feasible given the uniqueness of habitat values and resources in the Watagans Mountains. The Biodiversity Council noted that potential impacts to the Littlejohn's Tree Frog would have a significant impact on the survivability of the Watagans Mountains population of this threatened species.

The Biodiversity Council noted that the EIS had identified seven alternative locations for the Olney switching station. The Biodiversity Council recommended that an alternative site is used for the Olney switching station that does not impact the Littlejohn's Tree Frog. The Biodiversity Council also recommended that complete avoidance of all known Littlejohn's Tree Frog habitat with a two kilometre buffer zone (breeding and terrestrial – determined through existing records and further expert advice).

Response

Potential alternative sites for the southern switching station were assessed as detailed in *section 3.6.1, Chapter 3 (Alternatives and options)* of the EIS. The preferred site for the southern switching station was assessed as Option 1 – Olney State Forest. This site was preferred as it was located on an old commercial timber plantation and had significant community benefits as it would not require the project to be constructed through the communities of Martinsville and Cooranbong.

As noted in *section 3.6.2* of the EIS, high-risk artificial breeding ponds for the Littlejohn's Tree Frog were identified and avoided compared to the preliminary HTP corridor through alternative routes in the Olney State Forest, adjacent to the Jilliby State Conservation Area. Despite this, *Technical Report 1 – Biodiversity development assessment report* acknowledges that the project would result in potential direct and indirect impacts on Littlejohn's Tree Frog where impacts were unable to be avoided.

Following public exhibition of the EIS and in response to consultation carried out with species experts and regulators, amendments and refinements to the project have been made to further minimise impacts to Littlejohn's Tree Frog within the Olney State Forest. These changes are reflected in the disturbance areas and no-go zones mapped in *Appendix E (Revised biodiversity development assessment report)* of the Amendment Report.

Appendix E (Revised biodiversity development assessment report) contains expanded and detailed information on the likely impacts to threatened species such as Littlejohn's Tree Frog. Particular focus on avoidance of impacts to Littlejohn's Tree Frog has been applied to the greatest extent possible for this species, including redesign of tower and related infrastructure locations to identify additional no clearing zones and avoid impacts within important breeding habitat along waterways

(refer to section 9.1.3.5 of *Appendix E (Revised biodiversity development assessment report)* for more detail on the actions taken to avoid and minimise impacts). Importantly, the project has avoided 60 of 62 of the recently constructed breeding ponds for this species. Where impacts remain unavoidable, the impacts would be offset via the SODA to be delivered by Conservation Programs, Heritage and Regulation (CPHR) group in NSW DCCEEW, which will include investment in conservation outcomes for this species. It is anticipated that the SODA will be delivered in line with the CIS.

6.3 Business Hunter

Business Hunter provided a submission in response to the public exhibition of the EIS (21 September 2025). The submission expressed strong support for the project as a critical enabler of energy reliability, security, and regional economic growth, emphasising the importance of continued engagement with local businesses and best-practice management of environmental and social impacts. This section provides a summary of the issues raised and consideration of those issues.

6.3.1 Support for the project

Summary of issue

Business Hunter expressed support for the project as infrastructure that would strengthen grid resilience and support existing and future industries, and as a critical enabler of energy reliability and security in NSW.

Response

EnergyCo notes Business Hunter's support for the project.

6.3.2 Engagement

Summary of issue

Business Hunter noted that local businesses and communities still have limited clarity about the scale and type of economic and employment opportunities associated with the project. Feedback provided to Business Hunter highlighted a need for ongoing engagement so local suppliers can understand procurement pathways and how to participate. Business Hunter acknowledged the commitment in the social impact assessment to prepare a local business and employment strategy reflecting EnergyCo's Hunter-first approach, and expressed interest in continued engagement as that strategy is developed and implemented.

Response

EnergyCo notes Business Hunter's recommendation for ongoing engagement with local businesses as part of the local business and employment strategy. EnergyCo is committed to ongoing engagement with local businesses and suppliers as the project progresses to keep these stakeholders informed of opportunities to participate in procurement opportunities. Mitigation measure S01 involves the establishment of a social impact management plan, which will include mechanisms for community and stakeholder input into mitigation planning and evaluation. This

commitment to ongoing consultation with the community and stakeholders is reflected in mitigation measures proposed to manage impacts to businesses and facilitate ongoing participation of local businesses, including:

- mitigation measure S02, which involves the establishment of a community communication strategy, including the provision of regular project updates using a range of communication channels to key stakeholders such as Hunter businesses
- mitigation measure S05, which describes the local business and employment strategy, including the provision of fair access to Australian, regional and local suppliers and commitments to an ongoing program of engagement with regional suppliers and contractors
- mitigation measure S06, which involves the implementation of an industry and Aboriginal participation plan outlining tailored strategies to strengthen Aboriginal business participation (refer to *Appendix D (Updated mitigation measures)* of the Amendment Report).

EnergyCo has already undertaken early engagement to support local business readiness, including an expression-of-interest process, industry information sessions and the release of procurement pathway information for potential suppliers. EnergyCo will continue to engage with Business Hunter and the wider regional business community as the project progresses to share information on procurement processes and maximise opportunities for local employment and regional supply chains.

6.3.3 Social

Legacy housing

Summary of issue

Business Hunter supports the proposal from the Mayor of Lake Macquarie for temporary worker accommodation to be constructed to a standard that allows future conversion to affordable housing. The submission notes that such an approach would provide an ongoing community benefit consistent with the project's broader social objectives.

Response

EnergyCo recognises the importance of exploring opportunities to create positive housing and economic outcomes for local communities. EnergyCo is involved in ongoing discussions with councils regarding opportunities to provide legacy housing across EnergyCo's portfolio of projects.

6.3.4 Other matters

Economic – impacts to local business

Summary of issue

The submission identified significant potential for regional employment generation and investment throughout the planning, construction and operation of the project. It commended EnergyCo's Hunter-first procurement approach, which prioritises local employment and the engagement of regional and First Nations businesses, as well as the creation of training and supply opportunities.

Business Hunter encouraged continued commitment to these principles to maximise local benefit and regional capacity-building.

Response

EnergyCo acknowledges Business Hunter's recognition of the employment and regional economic benefits associated with the HTP. As identified in the EIS (refer to *section 22.4, Chapter 22 (Other matters)*) and *Technical Report 19 – Economic impact assessment*, the project would create substantial local and regional employment and procurement opportunities during construction, with positive flow-on benefits for suppliers and service industries. EnergyCo's procurement framework includes a Hunter-first approach to maximise local participation, consistent with the NSW Government's commitment to regional economic development and capacity building (refer to *Chapter 6 (Engagement)* of the EIS). Mitigation measure E1 outlines that a local workforce development plan, a local industry participation plan and an Australian industry participation plan will be developed for the project to promote local worker participation. EnergyCo will continue to engage with local industry groups, First Nations businesses and councils to promote regional supply chain participation during delivery of the project.

6.3.5 Environmental management

Summary of issue

The submission also stressed the importance of adopting best-practice environmental management to minimise land-use conflicts, reduce ecological disturbance, protect biodiversity corridors, and ensure fair engagement and compensation for affected landowners.

Response

As outlined in *Chapter 24 (Environmental management)* of the EIS and revised in *Chapter 6 (Environmental management)* of the Amendment Report, the approach to environmental management for the project will be consistent with:

- the objective of avoiding and minimising impacts throughout all stages of the project
- the relevant Conditions of Approval for the project (if approved)
- mitigation measures and management plans proposed for the project (refer to *Appendix D (Updated mitigation measures)* of the Amendment Report)
- the construction environmental management plans (CEMPs) ((for construction) and environmental management system (for pre-construction and operation) to be implemented for the HTP.

Mitigation measures proposed for the project include:

- mitigation measure LP1, which includes the minimisation of land use conflicts through continued design refinements to minimise impacts on existing land use and properties as far as practicable
- mitigation measure B1, which includes the implementation of a biodiversity management plan for the duration of construction to minimise impacts to biodiversity as much as possible
- mitigation measure S02, which involves the development of a community communications strategy to establish approaches to facilitating communication with the community through detailed design and construction of the project.

With regard to compensation for affected landowners, where the project crosses private property, EnergyCo's priority is to work directly with the landowners to negotiate an easement. The easement agreement will outline the rights and responsibilities of both parties for the ongoing use of the land, as well as compensation.

In NSW, land acquisition follows the *Land Acquisition (Just Terms Compensation) Act 1991*, which sets out the process and how compensation is decided. Every potentially affected landowner has a dedicated place manager who is available to meet, provide information and offer ongoing support.

6.4 The Centre for Independent Studies

The Centre for Independent Studies (CIS) provided a submission in response to the public exhibition of the EIS (24 September 2025). The submission expressed concern that claims about the project's affordability and impact on electricity prices are unsubstantiated. This section provides a summary of the issues raised and consideration of those issues.

6.4.1 Strategic context

Consideration of relevant public policy documents

Summary of issue

The Centre for Independent Studies (CIS) expressed concern that claims about the project's affordability and impact on electricity prices are unsubstantiated. The CIS contested the assertion that the HTP will lower consumer electricity costs and deliver 'affordable electricity' in the long run. It argued the EIS and its technical reports lack consumer-facing analysis, such as modelling of consumer bill impacts or wholesale price trajectories, to back up claims of affordability. Instead, it was noted that the EIS relies on AEMO's 2024 *Integrated System Plan* (ISP) classifying HTP as an 'urgent NSW Actionable Project' as proof of affordability, which the CIS stated is a misreading of the ISP. CIS pointed out that AEMO's CEO has publicly confirmed that the ISP costs are not used to forecast prices or evaluate the overall costs of the transition.

The CIS further argued that the ISP is not a realistic base case for assessing affordability, as all its scenarios are constrained by government policy, including the federal government's 82 per cent renewables by 2030 target. It was noted that this constraint removes a required consideration of risk to consumers from uncertainty, such as the risk of over-investment if renewable delivery falls short. The CIS suggested the 82 per cent target is unlikely to be achieved due to factors like slow new renewables commitment and major workforce capacity barriers. It noted that even under the ISP's optimistic Step Change scenario, the weighted net market benefit of the HTP is only \$99-251 million NPV on a project cost of \$1.178 billion, a narrow margin highly contingent on rapid renewable build-out.

The CIS pointed to the 2024-25 CSIRO GenCost report, which suggests a 90 per cent renewables grid – which the HTP is designed to support – will deliver substantially higher electricity prices than currently faced by consumers. CSIRO data for integrated renewables at 90 per cent penetration ranges from \$125/MWh to \$176/MWh, and NSW is already at \$152/MWh with only 35.3 per cent renewables. The CIS stated that the CSIRO's upper bound of \$176/MWh should be taken as a lower

bound for future electricity prices, given that CSIRO's cost estimates are likely underestimated due to optimistic capacity factors, ignored transmission cost blowouts, and potentially underestimated battery storage and firming infrastructure requirements.

The CIS concluded that increasing reliance on renewables will lead to consumer prices rising further and that there is no basis for claiming HTP will 'strengthen the supply of clean and reliable electricity', as transmission lines do not create inertia or dispatchable capacity. The CIS asserted that the project's approval cannot be justified by unsubstantiated claims of affordability and reliability.

Response

Detailed information regarding the need for the project was provided in *Chapter 2 (Strategic context)* of the EIS.

As the remaining coal-fired power stations close, the HTP is critical for energy security in NSW.

Coal-fired power stations currently provide most of our electricity supply however most of these power stations are reaching the end of their life and are due to close in the next 10 years. At the same time, electricity demand is increasing due to population growth, and increased electrification of vehicles, homes, businesses and industry. This means new electricity supply and the required associated transmission infrastructure is needed urgently.

The NSW Government has developed the *NSW Electricity Infrastructure Roadmap* (the Roadmap) to transition NSW to a cleaner future and ensure this new supply comes from renewable energy. The Energy Corporation of New South Wales (EnergyCo) as infrastructure planner under the *NSW Electricity Infrastructure Investment Act 2020* (EII Act) is responsible for coordinating the delivery of the Roadmap, including building new transmission lines, like the HTP, to connect renewable energy generation in Renewable Energy Zones (REZs) to the electricity grid.

To maintain the energy supply to the Hunter, Sydney and Illawarra regions, 500 kilovolt (kV) transmission connections are required between Bannaby substation in Marulan south of Sydney and Bayswater Power Station in Liddell in the Upper Hunter Valley. These 500 kV transmission connections and existing 500 kV transmission lines in NSW are referred to as the '500 kV Ring' (refer to *Figure 1.1* in the EIS). The HTP would close the northern gap of the 500 kV Ring, connecting Bayswater to a new switching station in the Olney State Forest near Eraring.

Both the NSW Government and the Australian Government recognise the strategic importance of the project and require it to be built as quickly as possible and in a way that minimises impacts to people and the environment.

The HTP:

- is an urgent NSW Actionable Project under the AEMO's *2024 Integrated System Plan* for the transition of the National Electricity Market (NEM) to renewable energy over the next 20 years
- would receive part of the \$4.7 billion allocated to the NSW Government to modernise the electricity grid under the Australian Government's *Rewiring the Nation* program
- is a 'Deliver Now' project under the *Network Infrastructure Strategy* (EnergyCo 2023a) to support the delivery of the *NSW Electricity Infrastructure Roadmap* (the Roadmap)

- is a Priority Network Infrastructure Project (PNIP) under the NSW *Electricity Infrastructure Investment Act 2020* (EII Act) because it is essential for energy security and avoiding breaches of the NSW Energy Security Target.

The objectives of the project are to (among others):

- provide five gigawatts (GW) of additional transfer capacity between Bayswater and Eraring
- enable the supply of electricity from the Central-West Orana and New England REZs
- strengthen the supply of clean and reliable electricity to consumers – particularly in the Hunter, Sydney and Illawarra where 80 per cent of the State's electricity is used.

EnergyCo recognises that electricity affordability is influenced by a complex interplay of market conditions, generation mix, and regulatory settings. Reducing electricity prices is not a specific objective of the HTP but is an objective of the Roadmap.

Not proceeding with the project would reduce the security of electricity supply in NSW. It would also discourage investment in renewable energy generation and storage within the emerging REZs. The provision of appropriate infrastructure to these zones is required to allow the adoption of new renewable technologies in the future, which is required to support the delivery of commitments and policies at a NSW Government, Australian Government and international level, particularly the commitment for Net Zero.

Overall, the HTP is a critical component in strengthening the supply of clean and reliable electricity to consumers and delivering long-term benefits to the NEM.

6.5 Committee for the Hunter

Committee for the Hunter provided a submission in response to the public exhibition of the EIS (24 September 2025). The submission expressed support for the project, encouraged best-practice environmental management to minimise disturbance to communities and biodiversity, and encouraged ongoing consultation with communities, industry, and experts to ensure informed decision-making and enduring benefits for the region and NSW. This section provides a summary of the issues raised and consideration of those issues.

6.5.1 Engagement

Future community and stakeholder engagement

Summary of issue

The Committee is dedicated to continuing its advocacy for the project as vital infrastructure for the Hunter and NSW. It commended EnergyCo's consultation to date and encouraged sustained engagement with affected communities, industry representatives, and technical experts throughout design and delivery. The submission recommended that decision-making on the project continue to be guided by science, expert advice, and transparent communication to ensure that community confidence and regional benefits are maintained.

Response

EnergyCo appreciates the Committee for the Hunter's support for the HTP as critical infrastructure for the region and NSW's energy transition. EnergyCo shares the Committee's view that strong consultation with communities and stakeholders, underpinned by robust scientific and technical advice, must continue to inform project decisions.

The Submissions Report and Amendment Report outline how feedback from stakeholders, including the Committee for the Hunter, has shaped refinements to the project. EnergyCo will continue to engage regional stakeholders through existing mechanisms such as briefings, targeted meetings and the Hunter–Central Coast Regional Reference Group (RRG). These forums provide a structured way to discuss regional priorities, community expectations and economic opportunities.

6.5.2 Other matters

Support for project / assessment methodology

Summary of issue

The Committee for the Hunter expressed strong support for the HTP, describing it as essential to NSW clean energy transition and the Hunter region's economic future. It identified the project as critical shared infrastructure under the Hunter Hydrogen Infrastructure Masterplan, supporting hydrogen development and industrial decarbonisation. The submission noted that investment in the project would secure energy supply, sustain heavy industry, and generate new jobs and economic activity as the region transitions away from coal. It emphasised the project's role in maintaining competitiveness for local manufacturing and supporting long-term energy security across the State.

Response

EnergyCo acknowledges the submission from the Committee for the Hunter expressing support for the HTP and its role in delivering the Roadmap and supporting the economic transition of the Hunter region.

EnergyCo notes the Committee's acknowledgment that the HTP will contribute to long-term energy security, attract new investment and support the creation of local jobs in the clean energy economy. The project aligns with the NSW Government's objectives to facilitate renewable energy generation and transmission that supports both industry decarbonisation and regional economic resilience.

EnergyCo welcomes the Committee's support and will continue to engage with regional stakeholders, including industry and economic development bodies, to ensure the project's delivery supports the growth of the Hunter's renewable energy and hydrogen sectors.

6.5.3 Justification and conclusion

General comments

Summary of issue

The Committee acknowledged the need for the project to be operational by 2028 and recognised the trade-offs made in corridor selection to balance impacts on local communities and the environment with broader State interests. It noted that the alignment largely follows disturbed land and avoids national parks but intersects with sections of State forest. The Committee requested that EnergyCo apply the highest standards of environmental and biodiversity management, supported by transparent decision-making and clear communication of mitigation measures.

Response

Subject to planning approval, main construction of the HTP will start in 2027 and take around 2.5 years to complete with operation commencing in late 2029. The approach to environmental management for the project will be consistent with:

- the objective of avoiding and minimising impacts throughout all stages of the project
- the relevant Conditions of Approval for the project (if approved)
- mitigation measures and management plans proposed for the project (refer to *Appendix D (Updated mitigation measures)* of the Amendment Report)
- the construction environmental management plans (CEMPs) (for construction) and environmental management system (for pre-construction and operation) to be implemented for the HTP.

The environmental management approach for the HTP was detailed in *Chapter 24 (Environmental management)* of the EIS and is revised in *Chapter 6 (Environmental Management)* of the Amendment Report.

6.6 Dantia

Dantia provided a submission in response to the public exhibition of the EIS (24 September 2025). The submission expressed support for the project and provided feedback regarding the community benefits scheme. This section provides a summary of the issues raised and consideration of those issues.

6.6.1 Justification and conclusion

Benefits of the project

Summary of issue

The submission expressed strong support for the project, recognising its importance in maintaining a reliable and affordable electricity supply for Lake Macquarie, the Hunter Valley and NSW following the planned closure of the Eraring and Bayswater power stations. Dantia identified the project as critical to energy security and as a catalyst for regional economic growth. It emphasised

the opportunity for the project to deliver substantial long-term community and economic benefits, stimulate local employment, and build regional workforce capacity.

Response

EnergyCo acknowledges this endorsement from Dantia.

6.6.2 Social

Community benefits scheme

Summary of issue

The submission noted that the project presents a significant opportunity to generate lasting employment and skills development within Lake Macquarie and the broader Hunter region. Dantia encouraged EnergyCo to commence consultation on the community and employment benefit program earlier than 2026 to allow sufficient time for businesses to prepare. It recommended setting minimum targets for engagement of local businesses, contractors, and workers, and identifying training programs to help local firms build the skills needed to participate. The submission emphasised the importance of using existing regional business networks to ensure wide participation and timely preparation for procurement opportunities.

The submission raised concerns that reliance on the ICN Gateway as the primary procurement platform may disadvantage small local businesses lacking the resources to engage through that system. Dantia suggested that EnergyCo provide additional, more accessible procurement pathways to ensure equitable participation for small and medium enterprises. It also supported the proposed temporary worker accommodation at Cooranbong, recommending that it operate on a market-rate basis to maintain fair competition among existing accommodation providers and maximise economic benefits to the local area.

Response

EnergyCo appreciates Dantia's strong support for local business participation and workforce development as part of the HTP and thanks Dantia for its constructive feedback and support for the development of a community and employment benefit program for the Hunter and Central Coast region. EnergyCo is expecting to commence consultation with relevant communities in 2026 to inform the design and delivery of the community and employment benefit program in the Hunter-Central Coast region that will ensure benefits are shared with the local communities hosting the renewable energy transition, including those hosting the HTP.

In the meantime, EnergyCo will continue to liaise with Dantia and other regional partners to share updates and identify opportunities for local businesses to participate in planning and delivery. EnergyCo's commitment to supporting local businesses and small and medium enterprises is reflected in mitigation measure S05, which requires a local business and employment strategy to be prepared and implemented during detailed design and construction (refer to *Appendix D (Updated mitigation measures)* of the Amendment Report). This strategy will include the following initiatives:

- identify local skills gaps and workforce skills and training requirements
- set targets for local employment in line with the NSW *Renewable Energy Sector Board's Plan* (NSW Office of Energy and Climate Change 2022)

- set diversity and inclusion targets that align with the *NSW Procurement Board Direction PBD 2023-01 Skills, Training, and diversity in construction* (NSW Treasury 2023)
- education and training partnerships, including with TAFE NSW and local high schools and the upcoming Cessnock Education Precinct to support energy transition career pathways
- support tailored training and upskilling programs for residents, with a targeted focus on young people, Aboriginal people, candidates seeking career transition from existing local industries, and older people
- providing full, fair, and reasonable access to Australian, regional and local suppliers, and including commitments to an ongoing program of engagement with regional suppliers and contractors
- investment in retraining and upskilling pathways for workers transitioning into renewable energy industries (e.g. technicians, infrastructure specialists)
- maintaining a local and regional supplier database to increase promotion and access to project opportunities
- prioritising local procurement and contractor engagement, with clear targets for small and medium enterprises linked to *NSW Procurement Board Direction PBD-2023-03 Procurement opportunities for small and medium businesses* (NSW Treasury 2023) and the *Small and Medium Enterprise and Regional Procurement Policy* (Buy NSW 2021)
- partnering with Business Hunter and Local Chambers of Commerce to promote procurement opportunities
- outlining mechanisms to monitor cumulative competition and changes to community access to key goods and services that may be affected by the project's local procurement activities
- delivery of workforce initiatives focused on Aboriginal employment pathways and contractor engagement

EnergyCo notes Dantia's concerns regarding the use of ICN Gateway as the primary procurement platform. For clarity, all expressions of interest registered through ICN Gateway will be provided to the Design and Construction contractors for their consideration during procurement, consistent with EnergyCo's current process. This ensures visibility of local suppliers without committing EnergyCo to any procurement outcomes at this stage.

As described in *section 4.3.7, Chapter 4 (Project description)* of the EIS, the temporary worker accommodation proposed for the project, including the Freemans Drive construction support site at Cooranbong, is intended to reduce the need for the main construction workforce to seek rental or short-term accommodation solutions in local areas with more constrained housing options. This would minimise the risk for impacts on local housing affordability or access from construction of the project. As such, as the temporary worker accommodation sites' purpose is specific to supporting construction of the project, the sites are not expected to compete with existing accommodation providers for people seeking accommodation that are not associated with construction of the project. Some workers may also be required to be housed in existing short-term accommodation locally prior to the establishment of temporary worker accommodation within construction support sites during the pre-construction minor works and early works stage of the project.

6.7 Glencore

Glencore provided a submission in response to the public exhibition of the EIS (24 September 2025). Glencore attached the HVO submission which was also received separately to their submission and therefore this section focuses on the matters that relate to Glencore's interests outside HVO and all HVO matters and their interests in Glencore are addressed in *section 6.12* of this Submissions Report.

6.7.1 Engagement

Consultation during project development

Summary of issue

Glencore expressed concern that the HTP corridor presented in the EIS is not consistent with a potential alignment amendment presented to Glencore to resolve key issues associated with Glencore's operations. Glencore requested clarification on certain project elements presented in the EIS which are inconsistent with advice previously provided by Glencore. These include:

- clarification on why a construction and operation access route was proposed in the EIS which crosses Glencore drainage areas and biodiversity offsets areas despite Glencore presenting an alternate option which avoids these areas
- clarification on why the HTP corridor proposed in the EIS deviates from the corridor that was revised from subsequent consultation with Glencore which the submission noted avoids impact to mining and agricultural land holdings and minimises impacts to Biophysical Strategic Agricultural Land (BSAL)
- safety concerns for the proposed access off Putty Road into Bulga mining complex' Dargins Farm property which Glencore noted is on a 100 kilometres per hour bend that is often at capacity during mine operations.

Response

EnergyCo acknowledges Glencore's submission and the issues raised regarding alignment consistency, operational interfaces and access planning.

Consultation with Glencore has been ongoing throughout the development of the HTP corridor. Engagement to date has focused on identifying and managing potential interactions between the proposed transmission infrastructure and existing mining operations, tenements, access routes and safety requirements. The alternative access route identified by Glencore, bypassing the biodiversity offset area, has been adopted in the Amendment Report and is reflected in the amended project description (*section 3.2.3, Chapter 3 (Description of amendments and refinements)* of the Amendment Report).

In response to feedback regarding impacts to Glencore land and their agricultural land holdings, EnergyCo is proposing a realignment of the HTP corridor at Mount Thorley as previously discussed with Glencore. This realignment forms part of the Amendment Report for the project. In summary, around four kilometres of the new 500 kV double circuit transmission line at Mount Thorley would be realigned, moving it further south and away from the Hunter River. This proposed realignment of

the transmission line at Mount Thorley as part of the amended project has been developed with input from the directly impacted landowners and stakeholders and would involve the transmission line continuing south adjacent to the Whittingham to Mount Thorley rail line before deviating in an eastward direction to join the exhibited HTP corridor north of the Putty Road / Broke Road intersection.

EnergyCo recognises the concerns raised regarding access to the Bulga mining operations (Broke Road). The Amendment Report includes a change to the access arrangements for HTP construction at Bulga. These changes have been proposed to respond to stakeholder feedback to:

- avoid a clean water diversion
- keep access separate from Bulga mining complex operations
- stay within the HTP corridor as much as possible.

This is described further in *Appendix A (Revised project description)* of the Amendment Report. A revised traffic and transport impact assessment has been prepared (refer to *Appendix H (Revised traffic and transport impact assessment)* of the Amendment Report) which also describes this change.

A project co-ordination group will be established with Glencore to manage critical interfaces on site to not disadvantage Glencore's operations at either HVO or Bulga during the construction of the HTP.

Consultation during preparation of the EIS

Summary of issue

Glencore expressed concern regarding the consultation undertaken during preparation of the social impact assessment, noting that no direct engagement occurred with Glencore. As a result, the EIS fails to identify or assess the social and operational implications for Glencore and other mining entities.

Glencore requested that further information is provided on how potential impacts have been considered and re-engage with Glencore to address deficiencies in the assessment. Glencore also requested that the Department of Planning, Housing and Infrastructure (DPHI) and EnergyCo liaise directly with Glencore on suitable approval conditions to ensure its operational and economic interests are not materially affected by the HTP.

Response

EnergyCo acknowledges Glencore's comments and recognises the importance of continued engagement with major resource operators whose landholdings and tenements interface with the project. Consultation with Glencore has occurred through multiple channels since the early phases of route development, including technical workshops, on-site meetings and stakeholder briefings. Feedback from these interactions has assisted in identifying key operational interface areas and informed several alignment refinements prior to finalising the EIS.

In developing the Amendment Report, EnergyCo has continued to engage with Glencore regarding key amendments such as the corridor realignment at Mount Thorley, avoidance of biodiversity impacts and protocols for continued co-ordination around key operational matters such as shared

use of haulage roads, utility readjustments, interface with the proposed HVO Continuation Project and Glencore's blasting within the mine areas.

EnergyCo is committed to managing the construction and operation of the HTP in such a manner that does not create unacceptable impacts to Glencore's operations.

6.7.2 Land use and property

Mining operations

Summary of issue

Glencore has expressed concern over the HTP's impacts on Glencore's activities and interests in the operation of the Bulga Coal Complex and Hunter Valley Operations (HVO). The key concern includes construction traffic impacts to Bulga mining complex operations on Broke Road and Lemington Road.

Note: Many of the operational concerns raised in the submission relate to Glencore's interests in HVO and have been addressed in *section 6.13* of this Submissions Report.

Response

Traffic generation during construction and operation of the HTP has been assessed in *Appendix H (Revised traffic and transport impact assessment)* of the Amendment Report. EnergyCo's proposed construction routes do not adversely impact Glencore's proposed realignment of Lemington Road as part of the HVO Continuation Project. However, through the project co-ordination group, EnergyCo, the network operator and the design and construct contractor will continue to co-ordinate together on these routes.

6.7.3 Agriculture

General impacts to agricultural land and practices

Summary of issue

Glencore noted that the HTP intersects with its farming areas, and other landholdings, and maintains that impacts have not been adequately identified for either the construction or operational phases. Glencore raised concern that the project may impact its agricultural landholdings.

Response

The assessment of agricultural impacts is detailed in *Chapter 13 (Agriculture)* of the EIS and informed by *Technical Report 15 – Agricultural impact assessment* and was developed according to the requirements of the project SEARs. As outlined in *section 13.1.3* of the EIS, the assessment of agricultural impacts was informed by landowner interviews to obtain information on the agricultural enterprises at properties throughout the project impact area to inform assessment, avoidance, and mitigation of impacts.

The amended project at Mount Thorley is a direct response to feedback provided by Glencore and HVO regarding their requirements to minimise impacts to high value agricultural land by minimising a severance effect that the HTP alignment (as exhibited in the EIS) was considered to have on the land, thereby maximising the available area of contiguous productive land.

EnergyCo consulted with HVO and its leaseholders in October 2025 on proposed amendments and refinements to the project to better understand how the HVO leaseholders use their land. A third party agreement between Glencore and EnergyCo will address how the design and construct contractor will coordinate construction activities within the mining buffer land and on adjacent farm land as well as interactions with mining operations.

As noted in *section 5.10.1, Chapter 5 (Response to community submissions)* of this Submissions Report, property specific property management plans will be implemented to address landowner concerns about the impacts of construction activities and permanent infrastructure to agricultural operations. Property management plans will include measures to minimise disruption to agricultural operations during construction informed by consultation with landowners to understand agricultural activity and requirements at individual properties (refer to *Appendix D (Updated mitigation measures)* of the Amendment Report).

Where the alignment crosses private property, an easement agreement will outline the rights and responsibilities of both parties (the network operator and the landowner) for the ongoing use of the land, including land management responsibilities, as well as compensation.

6.8 Gliding Australia

Gliding Australia provided a submission in response to the public exhibition of the EIS (24 September 2025). The submission outlined concerns about aviation safety impacts from the project, particularly in relation to gliding operations at Warkworth Aerodrome. The submission outlined concerns regarding the consultation undertaken for the project and of the adequacy of *Technical Report 16 – Aviation impact assessment*. This section provides a summary of the issues raised and consideration of those issues.

6.8.1 Engagement

Consultation on the project – general

Summary of the issues

Gliding Australia stated that they were not properly consulted during preparation of the EIS, despite Gliding Australia's statutory role under the Civil Aviation Safety Regulations (CASR) Part 149. Gliding Australia is concerned that *Technical Report 16 – Aviation impact assessment* was developed without a site visit to Warkworth Aerodrome and contained factual inaccuracies regarding gliding operations, launch procedures, and circuit patterns.

The submission further stated that consultation records within the EIS misrepresented the extent of engagement with Hunter Valley Gliding Club, omitting earlier correspondence and downplaying concerns raised on multiple occasions. The organisations requested renewed, documented

consultation with EnergyCo and its consultants to ensure aviation risks are properly understood and addressed.

Response

EnergyCo acknowledges the feedback from Gliding Australia and the Hunter Valley Gliding Club regarding consultation undertaken during preparation of the EIS and *Technical Report 16 – Aviation Impact Assessment*. EnergyCo recognises Gliding Australia’s statutory role under the CASR Part 149 framework for the administration and oversight of gliding operations in Australia, and the operational knowledge the organisations has.

EnergyCo also acknowledges Gliding Australia’s concerns around the engagement with the Hunter Valley Gliding Club, noting that *Technical Report 16 – Aviation impact assessment*, included Hunter Valley Gliding Club’s correspondence dated 4 December 2023, and referenced a meeting in June 2025. EnergyCo acknowledges that *Technical Report 16 – Aviation impact assessment* did not include all correspondence that was made by the Hunter Valley Gliding Club, however, considers that the key themes were addressed within the assessment.

During refinement of the alignment and development of the EIS, EnergyCo undertook ongoing engagement with Hunter Valley Gliding Club. This included invitations to attend drop-in sessions in December 2023, receipt of initial feedback, and multiple interactions during the early stages of the project. Engagement continued throughout 2024 with meetings to discuss alignment refinements, visual impact considerations, and aviation impacts. Hunter Valley Gliding Club requested access to the aviation assessment and provided further correspondence regarding visual impacts and the Obstacle Limitation Surface (OLS). Throughout 2024, EnergyCo and Hunter Valley Gliding Club had 21 documented interactions, including emails, phone calls, and meeting arrangements, reflecting continued engagement and efforts to address the club’s concerns.

Throughout 2025, EnergyCo continued engagement with Hunter Valley Gliding Club and Gliding Australia regarding the aviation assessment and project development. This included proposed and held meetings, provision of information on the aviation assessment, and a meeting in June 2025 involving EnergyCo, Hunter Valley Gliding Club, and Gliding Australia to discuss consultation, aviation operations, and cumulative impacts. This meeting resulted in a list of agreed actions. Hunter Valley Gliding Club was informed of the public exhibition of the EIS and participated in further meetings, site visits, and discussions relating to tower locations and aviation risk. During 2025, there were 44 recorded interactions between EnergyCo, Hunter Valley Gliding Club, and Gliding Australia.

In relation to the concern that the assessment was prepared without a site visit to Warkworth Aerodrome, EnergyCo confirms that the assessment relied on stakeholder input, available aerodrome information, and industry-standard assessment methodologies.

Following the exhibition of the EIS, engagement has been undertaken to ascertain a greater understanding of the Hunter Valley Gliding Club’s concerns and has involved 47 interactions (consisting of emails, phone calls, meetings, site visits and a risk assessment workshop) since exhibition of the EIS. Additional analysis of aviation activities at the Warkworth Aerodrome in response to submissions has been undertaken by Aviation Projects and is included in *section 8.16* of this Submissions Report. Engagement and consultation will continue throughout detailed design and construction in line with the recommendations set out in *Technical Report 16 – Aviation Impact Assessment*.

6.8.2 Hazards and risks

Aviation safety – assessment approach

Summary of issue

The submission argued that *Technical Report 16 – Aviation impact assessment* does not apply a structured risk assessment methodology consistent with CASA Safety Management System (SMS) standards, specifically SMS 3 – Safety Risk Management and the GAus Manual of Standard Procedures Part 5. It stated that the assessment relies on subjective statements about acceptable clearance heights and risk levels, without reference to established accident evidence demonstrating that powerlines are a high-likelihood, high-consequence hazard.

The organisation emphasised that Warkworth Aerodrome supports over 3,700 annual aircraft movements, including gliding, general aviation, flight training, and emergency services. They explained that abnormal scenarios such as towplane engine failures or rope breaks routinely place aircraft at low altitude with limited options, and the proposed transmission line corridor would remove the only suitable emergency landing areas to the east of the airstrip. Gliding Australia believes that this represents an obvious and foreseeable aviation safety risk not adequately assessed in the EIS. The submission also called for a realistic, risk-based analysis that reflects actual operational conditions and emergency scenarios.

Response

EnergyCo acknowledges the concerns raised by Gliding Australia regarding the risk assessment methodology applied in *Technical Report 16 – Aviation impact assessment*. It is noted that CASA SMS standards and formal SMS-based risk assessments are a regulatory requirement for certified aerodromes and certain aviation organisations (such as Gliding Australia under Part 149) but are not a statutory requirement for uncertified aerodromes such as Warkworth Aerodrome. EnergyCo's position, supported by aviation specialists who undertook the assessment is that the risk analysis presented in *Technical Report 16 – Aviation impact assessment* is appropriate.

EnergyCo recognises the importance of a risk-based approach that reflects actual operational conditions and emergency scenarios, particularly given the high level of activity at Warkworth Aerodrome and the range of users, including gliding, general aviation, flight training, and emergency services. The concerns raised about abnormal or emergency scenarios – such as towplane engine failures or rope breaks at low altitude, and the removal of suitable emergency landing areas – are acknowledged as critical considerations for aviation safety.

Table 7 of *Technical Report 16 – Aviation impact assessment* in the EIS details an indicative emergency response action review. The indicative emergency response provides a number of options based on the altitude of the aircraft, with outlanding proposed in suitable paddocks within 30-45 degrees off runway heading where elevation is between 100 and 200 feet, immediately to the east of the Warkworth Aerodrome.

While a formal CASA/GFA risk assessment is not a statutory requirement, EnergyCo acknowledges Gliding Australia's concern at the level of assessment undertaken to support the conclusion of *Technical Report 16 – Aviation impact assessment*. Since public exhibition of the EIS, and in response to submission, EnergyCo facilitated a risk assessment workshop with Gliding Australia, Hunter Valley Gliding Club and a qualified aviation expert to assist in a review of how the Hunter Valley

Gliding Club can undertake operations following the construction of the HTP. The outcomes of this risk assessment can be used by the Hunter Valley Gliding Club to update their safety management system and operational procedures as required.

Aviation safety – management and mitigation

Summary of issue

The submission stated that the mitigation measures proposed in *Technical Report 16 – Aviation impact assessment* are insufficient and inconsistent with aviation risk management best practice. It noted that the sole control measure – providing pilots with tower coordinates – represents the lowest level of risk control and fails to reduce the inherent hazard. Assertions that gliders could “climb away from the corridor” or that 220 feet of clearance is “safe” were described as unsupported and inconsistent with real-world glider performance, particularly under abnormal or emergency conditions.

The organisations requested that EnergyCo commission a formal, independent aviation risk assessment using CASA-compliant methodologies to evaluate both normal and emergency operations. They also sought proper consultation with Gliding Australia and Hunter Valley Gliding Club and consideration of alternative transmission line alignments that avoid intrusion into obstacle limitation surfaces and preserve safe emergency landing options. The submission recommended that the current findings of *Technical Report 16 – Aviation impact assessment* be set aside until a valid, risk-based assessment is completed.

Response

EnergyCo acknowledges the concerns raised by Gliding Australia regarding the adequacy of management and mitigation measures proposed in *Technical Report 16 – Aviation impact assessment*. Section 5.6 of *Technical Report 16 – Aviation impact assessment* details that there is no minimum clearance distance that must be achieved between an aircraft and infrastructure such as a powerline within the CASRs during take-off and landing, instead detailing that operators are required to operate aircrafts safely. Due to this, a clearance of 220 feet was considered appropriate, and meeting the requirements of existing regulations.

Technical Report 16 – Aviation impact assessment assessed operational risks through scenario modelling and conservative assumptions, and identified a suite of management and mitigation measures, including the provision of obstacle data to Airservices Australia for inclusion on aeronautical charts, the potential installation of marker balls on transmission line conductors near Warkworth Aerodrome, and ongoing consultation with Hunter Valley Gliding Club and other stakeholders during detailed design, construction and operation.

EnergyCo recognises that, while CASA SMS standards and formal SMS-based risk assessments are not a statutory requirement for uncertified aerodromes such as Warkworth Aerodrome, aligning with SMS principles can be beneficial for projects with significant aviation activity in the vicinity. In response to stakeholder feedback, EnergyCo facilitated a risk assessment with Gliding Australia and a qualified aviation expert to review how the Hunter Valley Gliding Club can undertake operations with the construction of the Hunter Transmission Project. The outcomes of the risk assessment will be provided to the Hunter Valley Gliding Club to allow the club to update its safety management system (SMS) and operational procedures as required.

6.9 Hunter Joint Organisation

Hunter Joint Organisation provided a submission in response to the public exhibition of the EIS (24 September 2025). The submission expressed support for the project and urged that the project be designed and delivered in a way that maximises long-term community outcomes. This section provides a summary of the issues raised and consideration of those issues.

6.9.1 Project description construction

Worker accommodation

Summary of issue

The submission identified that temporary worker accommodation and construction activity will increase demand on already constrained local water and wastewater systems, particularly for councils outside the Hunter Water service area. It warned that the cost of infrastructure upgrades is beyond the capacity of small regional councils and urged EnergyCo to collaborate with local governments and agencies to identify and fund required upgrades. The Hunter Joint Organisation noted that improving local water infrastructure would not only support delivery of the HTP but also provide long-term benefits by enabling housing growth and economic diversification.

The Hunter Joint Organisation recommended that EnergyCo:

- collaborate with local councils and relevant agencies to identify and fund upgrades to local water and wastewater infrastructure
- ensure these upgrades both support project delivery and provide enduring benefits to housing and economic activity across the region.

Response

As identified in section 4.3.7, Chapter 4 (Project description) of the EIS, site infrastructure for temporary worker accommodation would be fully self-contained with respect to water and wastewater systems. The updated project description, included in Appendix A (Updated project description) of the Amendment Report has noted the following additional information with regard to wastewater treatment:

Wastewater management at temporary worker accommodation facilities and construction support sites would be provided by an on-site treatment system. The proposed treatment system would be a contained system and may include mechanical screening, biological and chemical treatment, filtration and disinfection. Waste solids produced by the treatment system would be emptied by a licensed contractor and disposed of at a nearby council operated wastewater treatment plant or other appropriately licensed facility. Treated effluent suitable for reuse for construction purposes, which is anticipated to include dust suppression and earthworks conditioning, would be stored in sealed tanks. The project does not propose to discharge treated wastewater into the receiving environment.

Following completion of construction activities, all temporary wastewater management infrastructure would be decommissioned and removed from the project impact area.

Further details on water supply during construction of the project is provided in *Chapter 7 (Response to local council submissions)* of this Submissions Report. Any potable water would be sourced via potable water suppliers such as Hunter Water in accordance with their requirements/agreements.

6.9.2 Social

Legacy housing

Summary of issue

The submission highlighted that at peak construction the project will employ approximately 750 workers with around 300 workers requiring temporary accommodation, which risks exacerbating the Hunter's already critical housing shortage. It noted that the project provides an opportunity to align with the NSW Government's broader housing targets by adopting modular and reusable construction designs for temporary housing that could later be repurposed as permanent dwellings or community infrastructure. The Hunter Joint Organisation also emphasised the importance of locating worker accommodation within or near existing towns to generate economic and social benefits for local communities.

The Hunter Joint Organisation recommends that temporary worker accommodation delivered under the project:

- utilise modular and reusable construction methods that will be repurposed for permanent housing stock in the Hunter region, in partnership with local Councils, Homes NSW and Community Housing Providers
- be located near or within towns and villages rather than remote rural sites to ensure economic benefits are realised by local communities
- utilise local suppliers and services wherever possible
- is designed using sustainability and amenity principles.

Response

EnergyCo acknowledges the submission from the Hunter Joint Organisation and appreciates its constructive recommendations regarding temporary worker accommodation and broader housing legacy outcomes. EnergyCo recognises the importance of exploring opportunities to create positive housing and economic outcomes for local communities and is involved in ongoing discussions with councils regarding opportunities to provide legacy housing. EnergyCo is involved in ongoing discussions with councils regarding opportunities to provide legacy housing across EnergyCo's portfolio of projects.

As described in *section 4.4, Chapter 4 (Project description)* of the EIS, construction of the project is expected to require 830 workers. The exhibited project included temporary worker accommodation that would be fully self-contained and would have sufficient capacity to cater for around 780 workers for the duration of the construction of the project, which is different to the numbers stated by Hunter Joint Organisation in the submission. Since exhibition of the EIS, changes to the worker accommodation proposed has increased the capacity of the temporary worker accommodation facilities to 900 workers by inclusion of worker accommodation at the Wollombi Road construction support site (noting worker accommodation at the Gouldsville Road construction support site is no longer proposed).

As described in *section 4.3.7* of the EIS, the provision of temporary worker accommodation at construction support sites as part of the project would reduce the need for the main construction workforce to seek rental or short-term accommodation solutions in local areas with more constrained housing options. As such, temporary worker accommodation has been proposed to house the main construction workforce during peak construction periods. In addition, the project is committed to the inclusion of local construction workforce where possible so that a proportion of the total construction workforce would reside locally.

EnergyCo also recognises the importance of utilising local suppliers and services wherever possible. This is outlined in mitigation measure S05, which outlines the project's commitment to the implementation of a local business and employment strategy, including the provision of fair access to regional and local suppliers and ongoing engagement with regional suppliers and contractors, maintaining a local and regional supplier database to increase access to project activities for these businesses, prioritising local procurement and contractor engagement with clear targets for small and medium enterprises, and partnering with Business Hunter and local chambers of commerce to promote procurement opportunities.

With regard to integrating sustainability and amenity principles into temporary worker accommodation design, the project's proposed sustainability initiatives are outlined in *section 25.6.2, Chapter 25 (Justification of the project)* of the EIS. Sustainability objectives for the project have been developed into themes which align with the Infrastructure Sustainability Council's IS rating scheme. Potential sustainability initiatives to be implemented for the project, including for the design and construction of temporary worker accommodation, include the incorporation of energy efficient construction plant and equipment, methods and practices, setting targets to maximise the reuse of materials, implementing water efficiency measures with a focus on achieving water savings and targeting water recycling and reuse, and identifying innovative measures during design and construction to mitigate impacts to landscape character and visual amenity.

Impacts on livelihoods

Summary of issue

The submission highlighted the future closure of the Eraring Power Station in 2027 and two Upper Hunter coal mines could result in the loss of over 12,000 direct and indirect jobs by 2030. It called for a structured workforce transition plan to redeploy affected workers into the HTP and other energy transition initiatives. The Hunter Joint Organisation proposed that this plan be developed in partnership with mining and energy companies, unions, and training providers to ensure that skilled labour remains in the region and that the social and economic impacts of closures are mitigated.

The Hunter Joint Organisation recommends that EnergyCo:

- guarantee preferential recruitment pathways for displaced workers through a formal workforce transition plan
- partner with mining and energy companies, unions, and training providers to redeploy skilled local workers into the HTP.

Response

EnergyCo acknowledges the planned closures of power stations and mines and the potential for this to result in job losses throughout the Hunter region. It is noted that there has recently been a decision by Origin to extend the operation of Eraring Power Station until April 2029, which is expected to be near the end of the main construction phase of the project.

The project is committed to Hunter-first employment and procurement principles, which are outlined further in mitigation measure S05 involving the preparation and implementation of a local business and employment strategy. This strategy will be implemented to ensure the project focuses on providing local jobs and supplier opportunities. The strategy also outlines commitments to support tailored training and upskilling programs for residents, including a targeted focus on those seeking career transition from local industries, and specific investment for upskilling of workers transitioning into renewable energy industries (e.g. technicians and infrastructure specialists), as well as education and training partnerships to support energy transition career pathways.

6.10 Hunter Region Landcare Network

The Hunter Region Landcare Network provided a submission in response to the public exhibition of the EIS (21 September 2025). The Hunter Region Landcare Network outlined several concerns with respect to terrestrial biodiversity impacts and the EIS' assertion that proposed biodiversity offsets can fully account for residual impacts to threatened species. This section provides a summary of the issues raised and consideration of those issues.

6.10.1 Biodiversity

Biodiversity offsets

Summary of issue

The Hunter Region Landcare Network expressed concern that the biodiversity offset scheme used has been criticised and that the standard has been raised from no net loss to overall net positive, noting there is no evidence that this change in requirements has delivered meaningful improvements in practice. The Hunter Region Landcare Network stated that inadequate detail was presented in the EIS on the delivery of the SODA and questioned whether offset liability costs can be sustained by EnergyCo. The Hunter Region Landcare Network requested that biodiversity offsets are specific to conservation efforts for affected State forests and including the preservation of wildlife corridors.

While acknowledging the urgency of developing renewable energy infrastructure, the Hunter Region Landcare Network requested that the assessment of the HTP be paused until a plan under the SODA is publicly disclosed, including funding commitments from EnergyCo. The Hunter Region Landcare Network suggests the dollar value of biodiversity offsets should be increasing rapidly over time to reflect increasing rarity. The Hunter Region Landcare Network requested that a strategic environmental plan for the Hunter, possibly delivered by a revision of the *Hunter Regional Plan 2041* (NSW Department of Planning and Environment 2022), be undertaken to inform a targeted offset proposed for the project.

Response

The CIS, which is guiding the offsetting approach for the project, was informed by current and past regional strategies including the *Hunter Regional Plan 2041* as suggested by Hunter Region Landcare Network.

As per clause 6.3A(1) of the Biodiversity Conservation Regulation 2017, a SODA with the Environment Agency Head (of NSW DCCEEW) may be entered into by the applicant or proponent of major project development after the development consent for, or approval of, the development is given. As such, assessment of the project cannot be paused until a SODA is developed, as a SODA is required to be developed following project approval.

A SODA must require the Environment Agency Head to carry out the retirement of like-for-like biodiversity credits and/or the funding of a biodiversity conservation action that would benefit the relevant threatened species or ecological communities.

A SODA must specify the number and class of biodiversity credits that would, at the time of entering the SODA, otherwise have been required under the relevant planning approval for the major project development, including under an instrument or agreement required to be made or entered into under the consent or approval in relation to that requirement (the required number and class of biodiversity credits).

Appendix E (Revised biodiversity development assessment report) of the Amendment Report includes a revised credit liability for the amended project in accordance with the Biodiversity Assessment Method 2020 (BAM). It is acknowledged that the cost of biodiversity credits can change over time depending on the demand and supply of credits in the biodiversity credit market and other factors.

Impacts to terrestrial biodiversity

Summary of issue

The Hunter Region Landcare Network raised concern that the impact of vegetation clearing had not been adequately assessed in the EIS. The Hunter Region Landcare Network noted that the project would clear large areas of native forest across four State forests, which, despite being described as degraded in the EIS, remain ecologically valuable. These forests are connected to national parks and private forests, and the proposed transmission corridor would create a significant break in the canopy, fragmenting habitat and disrupting species movement at a regional scale. The Hunter Region Landcare Network raised an additional concern that the project's impact to State forests would set a precedent for future development in State forests, potentially contributing to further regional impacts to habitat connectivity.

Response

Section 8.7 of Technical Report 1 – Biodiversity development assessment report and Appendix E (Revised biodiversity development assessment report) of the Amendment Report provide a specific assessment of the project's impact to NSW National Parks and Wildlife Service (NPWS) estate and State forests and the biodiversity values contained within that land. As outlined in *section 8.7.2 of Appendix E (Revised biodiversity development assessment report)* of the Amendment Report, the assessment identified 22 plant community types (PCTs) within State forests (comprising Olney, Watagan, Corrabare and Pokolbin State forests) of which three meet the criteria for an associated

threatened ecological community under the BC Act and/or EPBC Act. The vegetation mapped included several PCTs that were classified as being in moderate to good condition as well as PCTs that were mapped as derived or plantation vegetation.

Section 8.3.4 of *Technical Report 1 – Biodiversity development assessment report* and *Appendix E (Revised biodiversity development assessment report)* of the Amendment Report provides an assessment of the project's impact on habitat connectivity, with further detailed discussion on regional terrestrial habitat connectivity including mitigation options being provided in *Appendix J (Examination of regional terrestrial habitat connectivity)* of *Technical Report 1 – Biodiversity development assessment report* and *Appendix E (Revised biodiversity development assessment report)* of the Amendment Report. The assessment recognises the potential impact of the proposed transmission line in State forests on habitat connectivity, however, notes that this would be minimised through maintaining vegetation to a height of up to two metres within disturbance area B and no clearing zones along the alignment to facilitate wildlife connectivity for fauna species. This partial clearing approach would enable a gradual transition between the cleared easement and the surrounding forest or woodland, rather than an abrupt, hard edge. The 'no clearing zones' have been specifically defined to avoid impacts on gullies within State forests and nature reserves by stringing the lines at substantial distances and avoiding any clearing, where possible.

Impacts on habitat connectivity would be further managed through implementation of a connectivity strategy that will be developed to avoid and minimise impacts to connectivity for threatened species as required by mitigation measure B5 (refer to *section 8.7, Chapter 8 (Biodiversity)* of the EIS and *Appendix D (Updated mitigation measures)* of the Amendment Report).

6.10.2 Hazards and risks

Bushfire risks – general impacts, management and mitigation

Summary of issue

The Hunter Region Landcare Network raised concern that fire management measures presented in the EIS in the area adjacent to the HTP corridor are not sufficient to manage ongoing bushfire risk and network stability requirements. The Hunter Region Landcare Network requested that cultural cool burns are undertaken in areas adjacent to the HTP corridor to minimise bushfire risk.

Response

A bushfire risk assessment was prepared to support the EIS for the project and was included as *Technical Report 14 – Bushfire risk assessment* of the EIS and summarised in *Chapter 21 (Hazards and risk)* of the EIS.

The assessment considered the potential for the project to influence fire behaviour and for bushfires to affect the proposed transmission line infrastructure. The assessment also proposed bushfire management measures to reduce bushfire risk to and from the project (see *section 7.2 of Technical Report 14 – Bushfire risk assessment*).

Bushfire risk adjacent to the transmission line easement is primarily influenced by broader landscape factors such as vegetation and topography, which remain under the control of land managers and fire authorities, and fire weather. Notwithstanding, the bushfire mitigation measures

developed for the project incorporate design and operational measures to manage bushfire risk to the transmission network. These include transmission line design, operation and maintenance requirements under mitigation measure BF4, establishment and maintenance of asset protection zones at switching stations and construction support sites under mitigation measure BF5, and vegetation management within the easement and hazard tree zone in accordance with mitigation measure BF7. These measures will contribute to maintaining safe clearance, reducing localised fuel hazards within the easement and supporting broader landscape fire management effectiveness.

As outlined in *Chapter 21 (Hazards and risks)* of the EIS, even with the implementation of the identified mitigation measures, there remains a residual risk that bushfires originating in adjoining land may impact transmission infrastructure and result in temporary outages. This is an inherent characteristic of operating linear transmission assets within a bushfire-prone landscape.

The network operator will consult with the NSW Rural Fire Service, Forestry Corporation of NSW and land managers during operation about vegetation management and access arrangements to manage ongoing residual risks from bushfires in adjacent land to the transmission line easement.

6.11 Hunter Valley Gliding Club

The Hunter Valley Gliding Club provided a submission in response to the public exhibition of the EIS (22 September 2025). The submission outlined concerns with respect to the *Technical Report 16 – Aviation impact assessment*. This section provides a summary of the issues raised and consideration of those issues.

6.11.1 Engagement

Consultation on the project – general

Summary of issue

The submission detailed that consultation with the Hunter Valley Gliding Club was limited and that information necessary for their own safety impact assessment was provided late, was of poor quality and/or insufficient. The Hunter Valley Gliding Club stated that their submissions and concerns were not fully acknowledged, addressed or documented in *Technical Report 16 – Aviation impact assessment* or the EIS. Further, the Hunter Valley Gliding Club recommended that an agreed Obstacle Limitation Surface (OLS) be established in consultation with the Hunter Valley Gliding Club and requested an independent review of *Technical Report 16 – Aviation impact assessment*.

Response

EnergyCo acknowledges Hunter Valley Gliding Club's concern and position surrounding historical engagement, especially as it relates to the consultation process, access to information, timing of information and the perceived lack of genuine consultation. *Chapter 6 of Technical Report 16 – Aviation impact assessment* detailed consultation that was undertaken with various stakeholders including the Hunter Valley Gliding Club. *Technical Report 16 – Aviation impact assessment*, includes reference to Hunter Valley Gliding Club's letter dated 4 December 2023, and referenced a meeting in June 2025, which detailed a number of actions and the relevant responsible parties required to

close them out, noting that the actions had been addressed within *Technical Report 16 – Aviation impact assessment* as necessary. EnergyCo acknowledges that *Technical Report 16 – Aviation impact assessment* did not include all correspondence with the Hunter Valley Gliding Club, however notes that the key themes were addressed within the assessment.

During the refinement of the alignment, and development of the EIS, EnergyCo invited Hunter Valley Gliding Club to attend a drop-in session in December 2023. EnergyCo also received the club's initial feedback during this time and had six interactions with the club during this early stage of the project. Engagement continued throughout 2024, with meetings to discuss the alignment refinements in February, as well as details relating to the visual impact assessment and the aviation impact assessment. Hunter Valley Gliding Club requested the aviation report and sent further correspondence about visual impacts and the corridor's location within the OLS. In July 2024, Hunter Valley Gliding Club was advised the aviation report would be ready by late July and EnergyCo sought to meet with the club, with Hunter Valley Gliding Club agreeing to an August meeting. At the end of July, EnergyCo requested a meeting extension to late August. Due to a number of complications, the meeting was ultimately postponed, and the EIS timeline was extended, which the club acknowledged. Throughout 2024, there were 21 documented interactions between EnergyCo and Hunter Valley Gliding Club, including emails, phone calls, and meeting arrangements, reflecting ongoing engagement and attempts to address the club's concerns.

Throughout 2025, EnergyCo and Hunter Valley Gliding Club engaged in ongoing communication and meetings regarding the aviation report and project developments. Key milestones included proposed meetings in February and March, the provision of a brief on the aviation report in May, and a formal response from Hunter Valley Gliding Club. In June, a meeting with EnergyCo, Gliding Australia, and Hunter Valley Gliding Club addressed consultation, aviation operations, and cumulative impacts, resulting in a list of actions. The club was informed of the public exhibition in September and participated in further meetings and site visits, including a risk assessment and discussions about tower locations. There were 44 recorded interactions between EnergyCo, Hunter Valley Gliding Club, and Gliding Australia during the year.

EnergyCo is committed to improved ongoing engagement with Hunter Valley Gliding Club. Engagement has been undertaken to ascertain a greater understanding of the Hunter Valley Gliding Club's concerns and has involved 47 interactions (consisting of emails, phone calls, meetings, site visits and a risk assessment workshop) since exhibition of the EIS.

The Warkworth Aerodrome is an uncertified aerodrome under the Civil Aviation Safety Regulations. Uncertified aerodromes are not required follow the criteria detailed in Part 139 Manual of Standards (MOS). The assessment detailed in *section 5.6.1 of Technical Report 16 – Aviation impact assessment* used the standards of a Code 1 non-instrumental runway and standard operational assumptions as a baseline to evaluate aviation impacts against safety standards. These assumptions covered areas including emergency management, take-off and landing operations, runway code characteristics and the development of an OLS for the purpose of assessing operational viability.

In establishing these parameters, EnergyCo applied MOS derived standards typically used for certified aerodromes, including a Code 1 OLS. Although uncertified aerodromes are not required to adopt these standards, the assessment applied them to establish a baseline that would be a consistent and transparent basis for assessing potential impacts. This approach also aligns with Hunter Valley Gliding Club's correspondence dated 20 February 2024, which identifies the CASA

definition of a Code 1 OLS (Part 139 MOS, Chapter 7) as an appropriate minimum standard for assessing potential obstacles.

EnergyCo notes Hunter Valley Gliding Club's concerns regarding the use of a previously referenced OLS. The OLS applied in the assessment reflects recognised aviation methodologies and provides a clear, consistent framework for identifying and evaluating potential constraints.

Additional engagement with the Hunter Valley Gliding Club and Gliding Australia has been undertaken since the exhibition of the EIS in the form of meetings, site visits and ongoing communication. To assist Hunter Valley Gliding Club in their continued operation at the Warkworth Aerodrome, EnergyCo has facilitated a risk assessment with Hunter Valley Gliding Club and a qualified aviation expert to assist Hunter Valley Gliding Club in considering the operational implications of the construction of the HTP. EnergyCo acknowledges that ongoing engagement with operators is essential to ensure that emerging risks are identified and managed.

This risk assessment can be used by the Hunter Valley Gliding Club to inform amendments to operational protocols as required. Future engagement will continue throughout the detailed design and construction phases to ensure that aviation safety risks remain manageable and that mitigation measures remain effective and responsive to operational needs as detailed in *Chapter 6 of Technical Report 16 – Aviation impact assessment* of the EIS.

6.11.2 Hazards and risks

Aviation safety – assessment approach

Summary of issue

The Hunter Valley Gliding Club expressed concerns regarding the methodology and conclusions of *Technical Report 16 – Aviation impact*. The Hunter Valley Gliding Club expressed concern that information provided to EnergyCo, including OLS data, runway measurements and assumptions about landing runways, club and state procedures and regulations, was either misrepresented or used inappropriately in *Technical Report 16 – Aviation impact assessment* and EIS. The Hunter Valley Gliding Club asserts that, despite being an uncertified aerodrome, the aerodrome's activity level and risk profile warrant assessment standards equivalent to those applied to certified aerodromes.

The Hunter Valley Gliding Club objected to the approach and findings of the risk assessment, the modelling of emergency scenarios, the determination of safe distances from powerlines, and the consideration of issues outside of the scope of the CASA guidelines.

The Hunter Valley Gliding Club suggested that the information provided to EnergyCo was used to demonstrate compliance, rather than assess risk, and that some of their feedback was either omitted or downplayed. The submission also referenced the Australian Transport Safety Bureau (ATSB) report AR-2011-028 to highlight the consequences of wire strike accidents to support their argument for a more rigorous risk assessment. The Hunter Valley Gliding Club is of the opinion that this has resulted in a misleading assessment, that does not adequately consider the risks posed by the proposed transmission line.

The Hunter Valley Gliding Club also stated that *Technical Report 16 – Aviation impact assessment* was used to justify a pre-selected corridor for the transmission line, rather than objectively assess aviation risks. The Hunter Valley Gliding Club suggested that a formal risk assessment involving CASA and Gliding Federation of Australia should have been undertaken, with consideration of draft CASA guidelines and its revised classification approach. The Hunter Valley Gliding Club recommended the use of a Code 1 OLS, as defined by CASA, to be used as the minimum standard for assessing obstacle impacts, regardless of the aerodrome’s certification status. The Hunter Valley Gliding Club also noted discrepancies between *Technical Report 16 – Aviation impact assessment*’s description of operational procedures and those documented in the Hunter Valley Gliding Club’s Aerotowing Manual.

The submission also detailed that the *Technical Report 16 – Aviation impact assessment* did not consider emergency situations, cumulative impacts from other developments (such as mining), or the full range of aerodrome’s users beyond gliding operations.

Response

EnergyCo acknowledges that the Hunter Valley Gliding Club has concerns in relation to assessment methodology, and subsequent conclusions regarding the safety impacts of both gliders and powered aircraft operating from the Warkworth Aerodrome. *Technical Report 16 – Aviation Impact Assessment* was prepared in accordance with relevant guidelines published by the CASA, the National Airports Safeguarding Framework and other industry standards (see *section 3.1 of Technical Report 16 – Aviation impact assessment*) and in accordance with the SEARs. The Warkworth Aerodrome does not have an OLS, as a result of the uncertified status of the aerodrome. For the purposes of assessment, *Technical Report 16 – Aviation impact assessment* applied a conservative baseline assessment using a Code 1 non-instrument runway OLS. This OLS was provided to EnergyCo by Hunter Valley Gliding Club as an example of what had previously developed with mining companies to assess the impact of mine overburden dumps on the Hunter Valley Gliding Club operations.

The use of a Code 1 non-instrumental runway OLS is consistent with CASA MOS Part 139 (see *Technical Report 16 – Aviation impact assessment, section 5.6.1*). EnergyCo acknowledges Hunter Valley Gliding Club’s concern that information provided during consultation may have been perceived as being applied beyond its intended purpose. However, given the absence of an OLS at uncertified aerodromes, the use of the Code 1 non-instrumental runway OLS within *Technical Report 16 – Aviation impact assessment* was not intended to impose or establish an OLS for the aerodrome, but rather to provide a conservative baseline for assessing potential impacts in the absence of an OLS. This approach is consistent with industry practice when assessing potential risks at uncertified aerodromes and was applied to ensure that the assessment was precautionary and transparent.

EnergyCo notes that the Code 1 non-instrumental runway OLS is not endorsed by Hunter Valley Gliding Club and acknowledges their concern regarding its use in *Technical Report 16 – Aviation impact assessment*. Further assessment of the runway as a Code 2 non-instrumental runway was considered in accordance with the CASA’s submission and is provided in *section 8.16, Chapter 8 (Response to government submissions)* of this Submissions Report.

EnergyCo acknowledges Hunter Valley Gliding Club's concern that some operational details may differ from those documented in the Hunter Valley Gliding Club Aerotowing Manual. *Technical Report 16 – Aviation impact assessment* made a number of assumptions that are considered to be industry standard for gliding procedures. EnergyCo has since received relevant documentation from Hunter Valley Gliding Club to better understand operational procedures and realities as part of the development of this Submissions Report. The information provided included Hunter Valley Gliding Club's pilot safety briefing, safety management plan, their internal risk assessment for operations, their internal risk assessment for the HTP, emergency flow-chart, historical incidents during landing and take-off. These documents were provided to the aviation specialist for consideration during the facilitation of the risk assessment for Hunter Valley Gliding Club. EnergyCo will continue to engage with the Hunter Valley Gliding Club to discuss their specific operations to improve and tailor appropriate management responses for the project.

EnergyCo notes the Hunter Valley Gliding Club's concern that *Technical Report 16 – Aviation impact assessment* was used to justify a pre-selected corridor for the transmission line. Further information of alternative corridor considered are discussed in Sections 3.3, 3.4 and 3.5 of the EIS. Further information can also be found in section 8.16, Chapter 8 (*Response to government submissions*) of this Submissions Report.

Technical Report 16 – Aviation impact assessment assessed operational risks through scenario modelling and conservative assumptions, including indicative emergency scenarios such as launch failure and tow rope break. Clearance calculations within *Technical Report 16 – Aviation impact assessment* show minimum separation of approximately 220 feet under worst-case conditions. While a formal CASA/GFA risk assessment is not a statutory requirement, EnergyCo acknowledges Hunter Valley Gliding Club's concern regarding the level of assessment undertaken in informing the conclusions within *Technical Report 16 – Aviation impact assessment*. In response, EnergyCo has facilitated a risk assessment with Hunter Valley Gliding Club, Gliding Australia and a qualified aviation expert to assist Hunter Valley Gliding Club in considering the operational implications of the construction of the HTP (held on 5 February 2026). The outcomes of this risk assessment may be used by the Hunter Valley Gliding Club to assist in the updating their management systems and operational procedures.

EnergyCo notes Hunter Valley Gliding Club's reference to ATSB report AR-2011-028 regarding wire strike accidents. Wire strike risk was considered in *Technical Report 16 – Aviation impact assessment* and mitigation measures include the installation of marker balls on the transmission line if considered beneficial by Hunter Valley Gliding Club.

Aviation safety – general impacts

Summary of issue

Hunter Valley Gliding Club maintains that the project poses a serious and unacceptable risk to aviation safety at Warkworth Aerodrome and viability of the Hunter Valley Gliding Club due to hazards for launching and landing gliders and restrictions on airspace due to impacts on the OLS from the height and location of the transmission lines. Hunter Valley Gliding Club raised concerns regarding restrictions on emergency landing options and potentially affecting future aviation use of the site.

The Hunter Valley Gliding Club maintains its objection to the project based on the reasoning and evidence provided in its submission.

Response

EnergyCo acknowledges the concerns raised by the Hunter Valley Gliding Club regarding aviation safety, emergency landing options, and the future viability of Warkworth Aerodrome. EnergyCo appreciates that gliding is, by nature, a high-risk sport where severe or catastrophic outcomes are possible. EnergyCo understands the club's concern that the construction of new powerlines may introduce further obstacles that must be taken into account when planning and conducting flights near the HTP. To further consider and assess these risks, EnergyCo facilitated a risk assessment with Hunter Valley Gliding Club and a qualified aviation expert. This process was guided by Gliding Australia MOSP Part 5 – Safety Management System, ISO 3100 – Risk Management, and the CASA Risk Assessment Guidelines (CASA, 2022).

EnergyCo acknowledges the importance of emergency landing options for aerodromes, and notes that there are already restrictions on emergency landings to the west of the airstrip due to existing roads, mining activities, trees, and powerlines. During discussions with the club following the EIS exhibition, management of emergency scenarios to the west was discussed on-site. It was explained that, in the event of an emergency, pilots would attempt to return to the airfield to land. The risk assessment was conducted to help the club consider how the HTP might affect their operations, aiming to ensure the club can continue flying safely by managing environmental and infrastructure risks, just as they do for launches from the western boundary.

EnergyCo also notes, that the CASA submission on the EIS suggested further assessment of aviation operations in the Warkworth Aerodrome may be beneficial, including consideration of:

- comments from Gliding Australia and/or the Hunter Valley Gliding Club in relation to *Technical Report 16 – Aviation impact assessment*, with emphasis on the Indicative Emergency Response Action Review
- the feasibility of altering the transmission line corridor further to the north-east
- confirmation that there is no additional risk of a dragging tow rope impacting the transmission lines
- confirmation that a Code 2 OLS is not appropriate for the Warkworth Aerodrome.

In response, EnergyCo has undertaken further assessment and analysis of the item raised by CASA, as detailed in *section 8.16, Chapter 8 (Response to government submissions)* of this Submissions Report. The further assessment and analysis indicate that with the implementation of mitigation measures identified in *Technical Report 16 – Aviation impact assessment*, adverse impacts can be mitigated.

6.11.3 Social

Impacts on accessibility and livelihoods

Summary of issue

The Hunter Valley Gliding Club also raises concerns about the potential impact on the Hunter Valley Gliding Club's membership and viability, citing both actual and perceived increases in risk associated with the project.

Response

EnergyCo acknowledges the concerns raised by the Hunter Valley Gliding Club regarding the potential impact of the HTP on the ongoing viability of the club and the safe operation of Warkworth Aerodrome, including the potential for both actual and perceived increases in risk to affect membership and future use.

EnergyCo's position, as supported by the findings of *Technical Report 16 – Aviation impact assessment*, is that the project does not pose an unacceptable risk to the viability of the club, provided that the identified mitigation measures are implemented.

EnergyCo recognises that club's viability depends not only on technical safety but also on the confidence of members, visiting pilots, and the broader aviation community. It is important to note, that, consistent with VFR operations at uncertified aerodromes, the pilot in command remains responsible under CASR Part 91 for ensuring safe obstacle clearance and for accounting for aircraft performance, weather conditions, and operational variables when planning and conducting flight. The assessment undertaken in *Technical Report 16 – Aviation impact assessment*, provides a conservative analysis of potential project-related risks to support safe pilot decision-making but does not replace these regulatory obligations.

In support of the ongoing viability of the Hunter Valley Gliding Club and the safe, continued operation of the Warkworth Aerodrome, EnergyCo has facilitated a risk assessment with Hunter Valley Gliding Club, Gliding Australia and a qualified aviation expert to assist Hunter Valley Gliding Club in considering the operational implications of the construction of the HTP that can assist the Hunter Valley Gliding Club in updating its operational documentation which can subsequently be provided to relevant stakeholders.

6.12 Hunter Valley Operations

Hunter Valley Operations (HVO) provided a submission in response to the public exhibition of the EIS (24 September 2025). The submission expressed concern that the project would impact current and future activities at HVO North, HVO South, and the HVO Continuation Project. This section addresses submission items referenced by Glencore in relation to HVO. This section provides a summary of the issues raised and consideration of those issues.

6.12.1 Statutory context

Other statutory requirements

Summary of issue

HVO has concerns that the EIS does not fully consider the assessment requirements under the *State Environmental Planning Policy (Resources and Energy) 2021*. The EIS does not take into account public policy documents that seek to appropriately plan for, coordinate and manage competing activities.

Response

State Environmental Planning Policy (Resources and Energy) 2021 (Resources and Energy SEPP) contains provisions to facilitate the orderly and economic use and development of land containing mineral, petroleum and extractive material resources.

The project impact area includes areas covered by mining leases, mining lease applications and mining exploration licences. *Chapter 2* of the *Resources and Energy SEPP* outlines the assessment requirements and matters for consideration for development applications where the local council is the consent authority.

The project has been declared as critical State significant infrastructure (CSSI) under Schedule 5, section 30 of the *State Environmental Planning Policy (Planning Systems) 2021*. As such, the provisions of the Resources and Energy SEPP do not apply, as outlined in *section 5.2.3, Chapter 5 (Statutory context)* of the EIS.

As a matter of good practice and for completeness in addressing environmental impacts, key EPIs were considered (where relevant) in the EIS. The Resources and Energy SEPP was reviewed, however, was considered to have limited relevance to the project. Notwithstanding, the compatibility of the project with HVO's mining resources and interest is considered in *Chapter 12 (Land use and property)* of the EIS.

6.12.2 Engagement

Consultation during preparation of the EIS

Summary of issue

HVO reiterated its request for ongoing and meaningful consultation with EnergyCo, DPHI, and other relevant agencies to resolve outstanding issues relating to tenement interactions, infrastructure impacts, and operational constraints. The company emphasised that despite previous discussions, several matters remain unaddressed in the EIS, including potential impacts on declared coal resources, infrastructure, and agricultural operations. HVO sought clear commitments that future engagement will focus on collaborative assessment and mitigation of these impacts.

Specifically, HVO requested that:

- the proponent provides a comprehensive understanding of potential impacts to HVO's operations, interests, and businesses, including how these will be avoided, managed, or mitigated

- EnergyCo engage directly with HVO, DPHI, and NSW Resources to assess and resolve issues relating to tenement interactions, infrastructure integration, and potential resource sterilisation
- further consultation be undertaken with DPHI and the proponent to determine appropriate project conditions that protect HVO's operational and commercial interests
- engagement extend to other key agencies such as DCCCEW to ensure coordination across regulatory domains
- all engagement commitments be formalised prior to project approval to ensure transparency and accountability during detailed design and delivery phases.

Response

EnergyCo acknowledges HVO's feedback regarding consultation undertaken during preparation of the EIS and the request for continued engagement to address tenement, operational and infrastructure considerations. The EIS reflects the information, design status and assessments available at the time of EIS development including the information provided to EnergyCo from HVO during engagement activities on the project. Since public exhibition, the project team has met with representatives from HVO and continued to review technical inputs, clarify interactions with surrounding land uses and considered matters raised by mining operators, including potential implications for declared coal resources, existing infrastructure and agricultural activities.

EnergyCo will continue liaising with HVO, Glencore, NSW Resources and other relevant agencies to assist in clarifying matters relating to tenement interactions, infrastructure interfaces and potential operational considerations. Additional commitments are made within *Appendix D (Updated mitigation measures)* of the Amendment Report to provide more explicit information on the nature and scope of future co-ordination of mining operations, impacts to coal resources and future projects during the construction of HTP. Further to this, EnergyCo will enter into a third-party agreement with HVO, which will set out terms for the management of critical interfaces between HTP and HVO's interests.

6.12.3 Biodiversity

General biodiversity impacts

Summary of issue

HVO noted that the HTP would affect biodiversity values present on its landholdings, which it both owns and has invested in. The company stated that these biodiversity values hold significant importance to its business and expressed concern about potential project impacts on them.

Response

EnergyCo acknowledges the project intersects with areas of the Hunter Valley Operations Continuation Project (HVOCP). To ensure consistency with the HVOCP exhibited BDAR and the biodiversity values identified, EnergyCo adopted the existing mapping and survey information provided by Umwelt for the HVOCP in the HTP BDAR (refer to *Appendix B and P of Technical Report 1 – Biodiversity development assessment report* for more information). However, in response to feedback from CPHR an update to the land categorisations within the project impact area, as it intersects with the HVOCP, was required which resulted in an update to the land categorisation

mapping presented in *Appendix E (Revised biodiversity development assessment report)* of the Amendment Report.

As detailed in section 8.4.5.2 of *Technical Report 1 – Biodiversity development assessment report*, micro-siting of the project will be carried out during detailed design to further avoid and minimise impacts, including biodiversity values identified on HVO land. This would include specific focus on avoiding and minimising impacts on the areas of Central Hunter Grey Box-Ironbark Woodland in the New South Wales North Coast and Sydney Basin Bioregions, Hunter Floodplain Red Gum Woodland in the NSW North Coast and Sydney Basin Bioregions and Warkworth Sands Woodland in the Sydney Basin Bioregion threatened ecological communities within HVO land (as well as at other locations across the project impact area).

EnergyCo will prepare an interface management plan during detailed design, in consultation with HVO, and will address co-ordination of HTP's biodiversity management obligations with existing and future biodiversity requirements applicable to HVO and the HVOCP.

6.12.4 Land use and property

Mining operations

Summary of issue

HVO has expressed concern over the HTP's impacts on its operation. HVO stated that the proposed placement of HTP corridor has a substantial impact on current and future activities at HVO that has not been appropriately assessed, managed and mitigated in the EIS. The key concerns include:

- infrastructure placement could restrict current and future operations, including blasting
- construction and operational phases may interfere with HVO's compliance and obligations under existing approvals
- timing conflicts where HTP and HVO construction activities may overlap
- construction and operation of the HTP potentially interfering with HVO power supply which would impact mine operations including potential compliance issues
- several powerline relocations required for HVO projects will need redesign and recertification due to HTP interactions, and HVO asserts that the responsibility for associated rework and costs should rest with the HTP proponent
- access issues and impacts associated with access tracks, construction facilities and support areas, and timing of activities
- safety, training, and compliance responsibilities during construction, particularly liability for incidents near mining operations, are not addressed in the EIS
- construction activities impacting the primary mine haul road from HVO South to HVO's coal processing facilities
- concerns regarding construction traffic impacts to HVO operations on New England Highway and Lemington Road
- impacts to key water supply infrastructure
- the HTP corridor directly overlies declared coal resources, potentially preventing future development.

Response

The transmission line alignment has been refined in consultation with HVO to avoid and/or minimise impacts on the operational area, mine fill areas, sensitive vegetation, biodiversity offset areas, future projects, farming land, farm infrastructure and lease properties.

EnergyCo has continued to engage with HVO during preparation of the Amendment Report and to address the concerns raised in the submission. This engagement will continue during detailed design to ensure potential impacts on activities at HVO arising from the construction and operation of the HTP are identified and resolved in a collaborative manner. Measures to manage impacts on mining infrastructure and operations will be detailed in third party agreements that will require EnergyCo, the network operator and the design and construct contractor(s) to consider and mitigate impacts on mining operations (including mine blasting) while completing the detailed design and delivery of the project. The third party agreement (TPA) would include requirements in relation to:

- agreed utility adjustment arrangements on HVO land
- coordination with HVO in relation to blasting activities and consideration of the existing mines blast management plan. The detailed design of the transmission line towers would also seek to allow for a particle velocity of 100 metres per second as ground vibration criteria, which complies with the HVOCP EIS blasting criteria for high voltage transmission towers
- coordination of stringing across the haul road with the required operations at HVO
- management of power supply outage requirements, outage durations and timing.

The requirements for coordination with HVO including the management and sequencing of construction activities to minimise impacts on activities at HVO mine and the interface between the HTP planning approval and other relevant approval requirements held by HVO will also be documented and managed through the implementation of an interface management plan.

Further to this, additional mitigation measures have been added to *Appendix D (Updated mitigation measures)* of the Amendment Report which includes commitments to co-ordinate with HVO prior to and during construction of the HTP.

Construction interface

EnergyCo, along with the network operator and design and construct contractor(s), will work collaboratively to mitigate potential impacts on mining operations — including mine blasting, power outages and shared use of haulage roads — during the detailed design and delivery of the HTP. Operational activities proposed by Glencore in areas where HTP is under construction would be co-ordinated through the establishment of a project co-ordination group with representation from Glencore, EnergyCo, the network operator and the construct contractor(s).

Compliance and approvals

To manage the complexity of multiple planning approvals in force across the mining operations and the resulting interaction between the HTP approval (should it be granted), an interface management plan will be developed in consultation with HVO to address site specific compliance matters.

Transport and access

Traffic generation during construction and operation of the HTP has been assessed in *Appendix H (Revised traffic and transport impact assessment)* of the Amendment Report. EnergyCo has selected proposed construction routes to not adversely impact or conflict with HVO's proposed realignment

of Lemington Road as part of the HVO Continuation Project. EnergyCo will continue to co-ordinate with HVO prior to construction of both the HVO Continuation Project and HPT (whichever is approved first and when construction timing for the HVO Continuation Project is confirmed).

Water supply infrastructure

The HTP alignment avoids any direct impact to HVO's water supply infrastructure. Further consideration of potential indirect impacts will be resolved during detailed design to HVO's satisfaction.

6.12.5 Agriculture

General impacts to agricultural land and practices

Summary of issue

HVO noted that the HTP directly intersects its farming areas, and other landholdings, and maintains that impacts have not been adequately identified for either the construction or operation of the project. The submission raised concern that the project may reduce available areas for cropping and grazing, disrupt agricultural practices, and affect third party operators using HVO's agricultural land under licence.

It also highlighted uncertainty regarding the management of landowner obligations such as biosecurity and weed control, requesting that responsibilities for these matters be clearly defined and incorporated into weed management and other land management plans.

Response

Refer to *section 5.10, Chapter 5 (Response to community submissions)* of this Submissions Report for detail on how landowner obligations, including biosecurity and weed control, and impacts to agricultural operations, will be managed. The assessment of agricultural impacts is detailed in *Chapter 13 (Agriculture)* of the EIS and informed by *Technical Report 5 – Agricultural impact assessment* and was developed according to the requirements of the project SEARs. As outlined in *section 13.1.3* of the EIS, the assessment of agricultural impacts was informed by landowner interviews to obtain information on the agricultural enterprises at properties throughout the project impact area to inform assessment, avoidance and mitigation of impacts.

Third party agreements will establish responsibilities for land management, such as biosecurity and weed control, as well as responsibilities of both parties for the ongoing use of the land, including land management responsibilities and compensation during construction.

As noted in *section 5.10.1, Chapter 5 (Response to community submissions)* of this Submissions Report, property management plans will be implemented for impacted properties to address landowner/tenant concerns about the impacts of construction activities and permanent infrastructure to agricultural operations. Property management plans would include measures to minimise disruption to agricultural operations during construction informed by consultation with landowners and agricultural lease owners to understand agricultural activity and requirements at individual properties (refer to *Appendix D (Updated mitigation measures)* of the Amendment Report.

As detailed in section 5.10.1 of this Submissions Report, the proposed mitigation measures AG3 involves the development of a biosecurity management plan in consultation with landowners and relevant local council biosecurity officers in relation to the location of high biosecurity risk areas (refer to *Appendix D (Updated mitigation measures)* in the Amendment Report). The biosecurity management plan will define, at a minimum, roles and responsibilities for the implementation of weed management controls, including inspection and cleaning of vehicles, plant and equipment, and the management of earthworks and clearing activities.

Mitigation measure AG4 details that during operation biosecurity protocols and procedures along the transmission line easement will be managed in accordance with procedures and protocols under the network operator's environmental management system as per *Appendix D (Updated mitigation measures)* of the Amendment Report.

6.12.6 Social

Impact assessment approach

Summary of issue

HVO expressed concern regarding the lack of consultation undertaken during preparation of the social impact assessment, resulting in an inadequate assessment of social and operational implications for HVO and other mining entities.

HVO requested that further information be provided on how potential impacts have been considered and re-engage with HVO to address deficiencies in the assessment. HVO also requested that DPHI and EnergyCo liaise directly with the HVO on suitable approval conditions to ensure its operational and economic interests are not materially affected by the HTP.

Response

EnergyCo acknowledges HVO's feedback regarding consultation undertaken to inform the *Technical Report 6 – Social impact assessment* and the concerns raised about how social and operational implications for mining entities have not been reflected in the assessment.

While it is acknowledged that representatives from mining companies did not participate in stakeholder surveys undertaken as part of the EIS, *Technical Report 6 – Social impact assessment* addresses matters relevant to mining companies and their employees including livelihood, well-being, employment and education, access to health care and community services, and business sustainability.

EnergyCo acknowledges the considerable role mining companies play now and historically in the region's economy and within communities of the Hunter Valley. As such the project is committed to continued work with mining entities including HVO to manage potential social impacts through the development of a social impact management plan, a local business and employment strategy and a local and Aboriginal participation plan during detailed design.

6.12.7 Hazards and risks

Electric and magnetic fields – general impacts

Summary of issue

HVO has expressed concerns regarding potential indirect impacts from the project's electrical infrastructure, including electromagnetic fields (EMF), electrical induction, and related safety considerations for nearby infrastructure and operations.

Response

The EMF assessment (*Technical Report 17 – Electric and magnetic fields assessment*) evaluated the expected electric and magnetic field levels generated by the 500 kilovolt (kV) double-circuit transmission line under all operating conditions. Results confirmed that predicted EMF levels are well below the International Commission on Non-Ionizing Radiation Protection (ICNIRP) general-public reference limits and comply with Australian and international exposure standards. The project has been designed to minimise induction effects and electrical interference through appropriate tower configuration, conductor spacing, and grounding design in accordance with AS/NZS 7000 Overhead Line Design and Transgrid's network safety standards.

EnergyCo will continue to consult with nearby infrastructure operators, including HVO, during detailed design to ensure any interface risks – such as electrical induction, earthing compatibility, and equipment shielding – are appropriately managed. It is within the scope of the HTP design and construct contract to prepare a low-frequency induction study along the transmission corridor for assessing EMF or induction of fences, property, community and all third-party services.

6.12.8 Other matters

Economic – assessment approach

Summary of issue

HVO argued that the economic assessment (*Technical Report 19 – Economic impact assessment*) does not consider the costs or impacts of the HTP on coal mining operations or on NSW more broadly. Although the report notes that coal mining contributes around 50 per cent of the regional economy, it does not assess the project's potential effects on the industry, including any loss of royalty revenue to the State. HVO requested that these factors be properly evaluated to ensure the project's economic justification reflects the full balance of costs and benefits.

Response

The EIS (see *Chapter 22 (Other matters)*) and *Technical Report 19 – Economic impact assessment* addressed the project's economic benefits for the region and the State as required by the SEARs (see *Appendix A (Assessment requirements compliance)* of the EIS).

Potential interactions between the HTP and existing mining operations were considered in the land use and property assessment (see *Chapter 12 (Land use and property)*) and cumulative impact assessment (see *Chapter 23 (Cumulative impacts)* in the EIS). These assessments identified and evaluated potential overlaps with mining leases and associated access or safety considerations.

Notwithstanding, EnergyCo acknowledges that further economic assessment to address potential economic impacts on mining interests such as localised sterilisation of resources was required and this has now been completed within *section 5.19, Chapter 5 (Assessment of impacts)* of the Amendment Report.

As noted in *section 5.19* of the Amendment Report, the amended project impact area intersects 499 hectares of mine leased land, including across Mount Arthur Coal Mine, Maxwell Underground Coal Mine, Hunter Valley Operations, Mount Thorley Warkworth, Bulga Coal Mine and Centennial Coal/Newstan. The operational impacts on these mining complexes would be managed by agreement between the network operator and the mining operators so as to minimise direct impacts on mining interests as far as practicable. In relation to impacts on the broader mining industry as a result of the potential loss of coal royalties from the presence of project infrastructure within mining land, these impacts are anticipated to be negligible. This has been estimated based on the area of mine lease land within the regional economy (assumed to be the five local government areas within which the amended project impact area is located), which amount to 175,377 hectares. As such, the amended project impact area intersects 0.3 per cent of the total mine lease land within the regional economy. Applying the assumption that the area of mine lease land equates to revenue for the coal mining industry, the intersection of the amended project impact area with 0.3 per cent of the total mine lease land within the regional economy would have a negligible impact on the \$41 billion in exports and \$31 billion in value added of the coal mining industry within the regional economy. Notwithstanding EnergyCo, the network operator and the design and construct contractor(s) will continue to work closely with mining companies to further avoid and minimise these impacts through detailed design where practical.

6.12.9 Cumulative impacts

General cumulative impacts

Summary of issue

The company also highlighted the need to consider potential cumulative impacts arising from the timing and overlap of construction activities associated with the HTP and its own Hunter Valley Operations Continuation Project (HVOCP).

Response

EnergyCo acknowledges and appreciates the ongoing cooperation from HVO throughout the assessment of the HTP. The EIS considered other major projects in the region, including existing mining operations such as HVO and the proposed HVOCP, as part of the cumulative impact assessment (see *Chapter 23 (Cumulative impacts)* of the EIS. However, in light of further engagement with key personnel from HVOCP, *section 5.20, Chapter 5 (Assessment of impacts)* of the Amendment Report has been updated to provide further consideration of potential cumulative impacts of HTP and HVOCP specifically.

Through the establishment of a project co-ordination group, ongoing co-ordination will occur between HVO (and Glencore), EnergyCo, the network operator and design and construct contractor(s) to align construction schedules and plans between HTP and the HVOCP.

6.13 Hunter Valley Wine and Tourism Association

The Hunter Valley Wine and Tourism Association (HVWTA) provided a submission in response to the public exhibition of the EIS on an unspecified date. The submission recognised the importance of the project but raised traffic and transport related concerns and the potential impact to the visitor economy of the Hunter Valley. This section provides a summary of the issues raised and consideration of those issues.

6.13.1 Traffic and transport

Traffic impacts – construction

Summary of issue

The submission acknowledged the significance of the project for the State's energy transition but raised concerns regarding construction traffic impacts on the visitor experience and the condition of local roads.

HVWTA endorsed the priorities of the Pokolbin Mountains Road Residents, Landholders and Users Group, which include road safety, drainage, road widening and pavement quality.

Response

EnergyCo acknowledges HVWTA's concerns regarding construction traffic impacts. A traffic impact assessment was prepared to support the EIS for the project and was included as *Technical Report 4 – Traffic and transport impact assessment* of the EIS and summarised in *Chapter 11 (Traffic and transport)*. Construction of the project is expected to commence in 2027 and would take around 2.5 years, subject to weather.

Construction access routes and the indicative maximum daily traffic movements generated by construction are detailed in *section 4.3.5, Chapter 4 (Project description)* of the EIS. Heavy and light vehicle traffic generated by the project would be distributed across the construction access routes. The HTP hourly peak volumes as presented in *Table 11.2* of the EIS reflect the planned construction workers shifts (6am to 7am, and 5pm to 6pm) and do not necessarily align with the road network peak. However, not all construction routes would be used for the entire construction period, and construction traffic volumes on any particular construction access route would fluctuate (reduce) according to the time of day and the stage of construction.

Section 3.6.1 of the *Technical Report 4 – Traffic and transport impact assessment* describes the selection of construction routes. The selection of construction access routes was informed by a review of the concept design and early construction planning and has:

- prioritised roads that provide connection to construction support sites, the construction impact area (and access tracks determined in consultation with landowners) and the broader State and regional road network
- been informed by impact assessment outcomes, including level of service, turn warrant and sight distance assessments
- been determined in consultation with relevant stakeholders including Transport for NSW and local councils.

It is acknowledged that this would necessitate the use of sealed and unsealed local and Crown roads, particularly to access forestry roads and where topography or other environmental constraints limit access along the HTP corridor.

EnergyCo notes there are concerns about the condition of the local roads. Upgrade works would be required in several locations along the construction routes, including at key intersections, to cater safely for the proposed construction traffic volumes and delivery of oversized equipment or construction material, and ensure public road safety. The likely scope of these works are listed in *Table A-10 and A-11 of the Appendix A (Revised project description)* of the Amendment Report and locations identified in *section 5.3.12 of Appendix H (Revised traffic and transport impact assessment)* of the Amendment Report. Detailed design would take into further consideration factors such as road condition, drainage issues and road width to confirm the required works in consultation with the relevant road authorities.

In addition to this, pre-construction road dilapidation surveys and routine inspections will be completed along all nominated construction routes on local roads (mitigation measure TT6). Where rectification works are required due to project impacts, consultation with the appropriate road authority will be undertaken to confirm the scope of the work required.

EnergyCo recognises the challenges on many of the roads (such as Pokolbin Mountains Road) and that some submitters would like the condition of these roads improved. EnergyCo are committed to working with the community to ensure each road is fit for purpose for both the construction workforce and the local community.

A road safety impact assessment was undertaken as part of the traffic impact assessment and is included in *section 5.3.8 of Appendix H (Revised traffic and transport impact assessment)* of the Amendment Report. The interaction that the project traffic has with the road network would typically be at construction access points and on the proposed construction routes between the construction support sites and work areas. Safety for workers and other road users at these locations is important for the success of the project. A summary of potential road safety issues, their associated impacts and potential mitigation strategies to minimise them are included in *Table 5.60 of Appendix H (Revised traffic and transport impact assessment)* of the Amendment Report. Where required, mitigation measures have been included in *Appendix D (Updated mitigation measures)* of the Amendment Report, including intersection upgrades, restrictions of use (mitigation measure TT3) and the provision of additional advance warning signs, temporary reductions in speed limits or clearing of vegetation in consultation with the relevant road authority where required (mitigation measure TT2).

The specific matters raised by the Pokolbin Mountains Road Residents, Landholders and Users Group are addressed in *section 6.23* of this Submissions Report. As outlined in this section, mitigation measures were developed to minimise impacts to the residents on Pokolbin Mountains Road which have been informed through further engagement with this stakeholder. The measures include:

- a property access sub plan as part of the traffic management plan will be prepared for Pokolbin Mountains Road, parts of Mount View Road and Mount Baker Road, to manage construction vehicle access during construction to assist in minimising impacts to property access and the

- controls to maintain a suitable level of usability of the road during construction (for example, drainage) (mitigation measure TT14)
- a community communication strategy will establish the approaches to facilitating communication between the proponent and the community during construction including implementing real time traffic monitoring and SMS alerts for stakeholders that may be directly affected by changed including community groups (such as Pokolbin Mountain Road Residents Group (mitigation measure S02)
- management measures to prevent or minimise dust generation and impacts on vineyards from adjacent road upgrades and construction vehicle movements (mitigation measure AQ5).

Summary of issue

HVWTA expressed concern that high volumes of construction traffic along key tourist routes, including Wollombi Road, Hayes Road, Mount View Road, Broke Road, and Pokolbin Mountains Road, could significantly disrupt visitor movements during peak tourism periods. The submission noted that daily construction traffic may exceed 700 vehicle movements, overlapping with peak tourism hours. HVWTA noted that uncoordinated traffic activity during high-demand tourism periods could result in congestion, delays, and a diminished visitor experience HVWTA suggests that EnergyCo:

- prepare a detailed traffic management plan addressing peak tourism seasons, event weekends, long weekends and harvest periods
- restrict oversize and overmass (OSOM) vehicle movements during high-traffic and tourism-sensitive periods
- implement active traffic monitoring and coordination with local councils and tourism bodies to mitigate congestion risks.

Response

Table A-5, Appendix A (*Updated project description*) of the Amendment Report includes indicative vehicle movements during construction. Maximum daily movements of construction vehicles during peak construction would not exceed 434 light vehicles and 335 heavy vehicles for the Wollombi Road construction support site. As discussed above, this represents the worst case, peak construction period in 2028. Not all construction access routes would be used for the entire construction period, and construction traffic volumes on any particular construction access route would fluctuate (reduce) according to the time of day and the stage of construction.

As noted in section A.4.6 of Appendix A (*Updated project description*) of the Amendment Report, construction of the project would generally be carried out during recommended standard hours as defined by the Interim Construction Noise Guideline (NSW Department of Environment and Climate Change (DECC) 2009)), being Monday to Friday, 7am to 6pm, and Saturday 8am to 1pm). Temporary worker accommodation would be operational 24 hours per day, seven days per week, however, this will be for occupancy rather than associated with any construction related activities on site. It is acknowledged in section A.4.6 of Appendix A (*Updated project description*) of the Amendment Report that construction work may be required for discrete activities for safety, technical or public infrastructure operational reasons (e.g. to minimise utility and traffic disruptions). This would require some construction vehicle movements outside standard construction hours to support these activities, which could be minimised in line with construction traffic noise management measures detailed in the noise and vibration management plan (mitigation measure NV1, NV3 and NV6).

A traffic management plan would be implemented to manage the potential traffic and transport impacts of the project as required by mitigation measure T1 (refer to *Appendix D (Updated mitigation measures)* of the Amendment Report). The traffic management plan will include requirements and methods to consult and inform the local community of impacts on the local road network (including residents and businesses), provision of a response plan for any construction traffic incident and a complaints management process. The traffic management plan and supporting Traffic Control Plans will be developed in consultation with the relevant road authorities, Forestry Corporation of NSW, affected property and business owners, and emergency services. A community consultation strategy (S02) will provide mechanisms for communication and engagement during construction with key stakeholders (including businesses), including feedback mechanisms and engagement with tourism and recreational operators to minimise disruptions and support continuity of their operations during construction. The Hunter-Central Coast Regional Reference Group will also continue to operate during construction, which has representatives from the community, business and local councils.

The project would only require 12 OSOM deliveries during the construction period to deliver equipment to the Eraring substation, Bayswater South switching station and the Olney switching station. The OSOM routes for the project, as identified in *section 8.2.8 of Appendix H (Revised traffic and transport impact assessment)* of the Amendment Report, would mostly follow approved OSOM routes such as the New England Highway and the Pacific Motorway. OSOM movements are not required on Wollombi Road, Hayes Road, Mount View Road, Broke Road, and Pokolbin Mountains Road. OSOM movements would be subject to the requirements of the relevant road authorities but would generally occur at night to minimise disruption to the road network.

Summary of issue

HVWTA welcomed EnergyCo's proposed intersection upgrades, passing bays, and road condition surveys on key local roads. However, it emphasised that the increase in heavy vehicle traffic during construction could accelerate pavement deterioration and reduce the lifespan of these important tourism routes.

HVWTA requested formal funding and maintenance agreements to ensure roads are repaired and maintained at EnergyCo's cost during and following construction, safeguarding the long-term integrity of the Hunter Valley tourism road network. HVWTA suggests that EnergyCo:

- conduct pre-construction pavement assessments and upgrades where required
- fund ongoing maintenance of affected local roads throughout construction
- formalise long-term maintenance responsibilities to protect road safety and service quality.

Response

Technical Report 4 – Traffic and transport impact assessment of the EIS outlines mitigation measures to address community concerns relating to strain on local roads. Prior to main construction, pre-construction road dilapidation surveys and routine inspections will be undertaken for local roads, as noted in mitigation measure TT6. The surveys and inspections will be completed along all nominated construction routes on local roads. Where rectification works are required due to project impacts, consultation with the relevant road authority will be undertaken to confirm the scope of the work required. The intention of these surveys and inspections will be to identify any required upgrades

and complete the upgrades prior to construction. All required upgrades or required rectification works to local roads would be at the cost of EnergyCo.

Construction impacts on road conditions have been assessed in *section 5.3.7 of Appendix H (Revised traffic and transport impact assessment)* of the Amendment Report. The regional roads within the study area have been built to accommodate medium to high volumes of traffic and their pavement and cross sections have especially been built for high proportions of heavy vehicle use as well as OSOM vehicles. The Wollombi Road construction support site would generate a maximum of 335 heavy vehicle movements on a daily basis which equates to 11.2 per cent of total daily traffic of 2,983 vehicles on Wollombi Road. The increase of vehicles due to construction traffic would have minor impact on pavement condition.

Section 6.3 of Technical Report 4 – Traffic and transport impact assessment of the EIS assesses the operational impacts of the project. Routine maintenance activities would typically only require a light vehicle or sometimes a light truck with a small crew. Routine inspections and maintenance would occur on a monthly and yearly frequency. The daily movement number can be as high as 10 vehicle movements, however, would typically be much less than that. Due to the low traffic movements and minimal heavy vehicles involved in the maintenance activities, they are unlikely to have a noticeable impact on the road pavement condition throughout the traffic and transport study area and the contribution to cumulative impacts would be negligible.

All required upgrades or required rectification works as a result of construction traffic would be at the cost of EnergyCo, however, long-term road maintenance responsibility would remain unchanged from the current responsibility e.g. local councils or the NSW Government.

6.13.2 Social

Impacts on surroundings

Summary of issue

The submission acknowledged the significance of the project for the State's energy transition but raised concerns regarding impacts of construction on the visitor experience including historic significance of the road, being part of the Hunter Valley Vineyards District, visual amenity impacts, especially due to the importance of aesthetics in the area, and vegetation management.

HVWTA endorsed the priorities of the Pokolbin Mountains Road Residents, Landholders and Users Group including preservation of the area's scenic and historic character. HVWTA noted that Pokolbin Mountains Road forms part of the Hunter Valley Vineyards District, a high-value tourism and cultural area. HVWTA confirmed its willingness to work with EnergyCo, Cessnock City Council, and community stakeholders to minimise disruption and maintain the visual and experiential integrity of the wine region.

Response

Technical Report 6 – Social impact assessment of the EIS highlighted stakeholder concerns about visual impacts and changes to the natural and rural landscape. The project's potential effect on visual and landscape changes, and for enterprises dependent on land use versatility or visual amenity (e.g. nearby vineyards, equestrian centres, eco-tourism businesses), is addressed in *Chapters 6 and 7 of Technical Report 6 – Social impact assessment* as follows:

- *section 6.5.6* assessed the impacts on the tourism operation and visitor economy, with particular reference to feedback from the HVWTA and Pokolbin Mountains Road Residents, Landholders and Users Group, from changes in amenity during construction and concluded that the impact without mitigation would be medium (negative) for tourism operators in the surrounding local social localities
- *section 7.3.1* assessed the long-term impact of changes to the nature of landscape altering sense of place and concluded that the potential impact would be high (negative) for the corridor and local social localities.

EnergyCo will minimise temporary impacts on the access to recreational areas and the tourism sector during construction through the implementation of the social impact management plan (mitigation measure S01), community communication strategy (mitigation measure S02) and implementation of visual, traffic and noise mitigation measures near key visitor attractions (mitigation measures LV2–LV4, NV1, AQ1–AQ3, and TT1). To minimise long-term impacts on surroundings, EnergyCo will implement ongoing design refinements during detailed design (e.g. retention of vegetation buffers, reduced lighting) and implement the Community Communication Strategy, focusing on continued engagement with affected stakeholders to increase awareness of design refinements.

6.14 Hunter Wildlife Rescue

Hunter Wildlife Rescue provided a submission in response to the public exhibition of the EIS (24 September 2025). Hunter Wildlife Rescue outlined several concerns with respect to general biodiversity impacts and associated mitigation measures including the increased demand put on local native animal rescue services, impacts on frogs, biodiversity offsets, and mitigation measures for vegetation clearing. This section provides a summary of the issues raised and consideration of those issues.

6.14.1 Alternatives and options

Selection of the preferred route option

Summary of issue

Hunter Wildlife Rescue recognised and endorsed that the selection of the HTP corridor has been undertaken to avoid impacts to private landowners and to avoid impacts to high value habitat for threatened species including the Swift Parrot and Regent Honeyeater.

Response

EnergyCo acknowledges this endorsement from Hunter Wildlife Rescue.

6.14.2 Engagement

Future community and stakeholder engagement

Summary of issue

Hunter Wildlife Rescue requested that EnergyCo continue to consult Hunter Wildlife Rescue during the development of environmental management plans, especially with respect to providing specialist input into wildlife identification, location, recovery, relocation and rescue practices.

Response

EnergyCo acknowledges Hunter Wildlife Rescue's expertise in wildlife identification, location, recovery, relocation and rescue practices. EnergyCo has considered the feedback received to date during consultation with Hunter Wildlife Rescue as relevant to the biodiversity assessment and management approach proposed.

As outlined in *section 8.7.1, Chapter 8 (Biodiversity)* of the EIS, the biodiversity management plan (BMP) will be prepared by suitably qualified and experienced biodiversity experts in consultation with relevant government agencies including the Conservation Programs, Heritage and Regulation branch of the NSW DCCEEW (CPHR), NPWS, Forestry Corporation of NSW and the Australian Government DCCEEW.

Where feasible, the project will continue to consider opportunities to seek input from local wildlife experts, such as Hunter Wildlife Rescue, where appropriate.

6.14.3 Biodiversity

Impact assessment approach

Summary of issue

Hunter Wildlife Rescue requested clarity on the impact assessment approach and data used to reach the outcomes presented in *Technical Report 1 – Biodiversity development assessment report* of the EIS and EIS. Specific concerns and requests for clarification include:

- Hunter Wildlife Rescue expressed concern over the reliance on vehicle impact studies dated 2004, 2006 and particularly 'an older study' by Vestijens (1973), studying roadkill in the ACT. Hunter Wildlife Rescue stated that more local, contemporary vehicle strike data and vehicle strike studies, such as data held by NPWS, should have been used to inform the assessment
- concern that the Grey-Headed Flying Fox has been excluded as a candidate species in *Technical Report 1 – Biodiversity development assessment report* of the EIS on the basis that no breeding camps are located within sufficient proximity to the HTP corridor. Hunter Wildlife Rescue requests clarification on why winter and spring foraging habitat has not been assessed in *Technical Report 1 – Biodiversity development assessment report* of the EIS given its importance to Grey-headed Flying Fox survival. Furthermore, Hunter Wildlife Rescue requested clarity on why the Grey-headed Flying Fox was only included in the assessment of the Yengo Interim

Biogeographic Regionalisation for Australia (IBRA) sub-region for the purposes of *Technical Report 1 – Biodiversity development assessment report* of the EIS, despite being known to occur throughout the Hunter and Wyong IBRA sub regions

- whether the Yellow-Bellied Glider (*Petaurus australis*) has been considered as a candidate species in *Technical Report 1 – Biodiversity development assessment report* of the EIS requiring the retiring of biodiversity credits. Hunter Wildlife Rescue notes that the presence of the Yellow-bellied Glider has been acknowledged in *Technical Report 1 – Biodiversity development assessment report* of the EIS but not noted in the summary of total threatened species credits required.

Response

Technical Report 1 – Biodiversity development assessment report of the acknowledged that increased traffic as a result of the project has the potential to result in vehicle strike to threatened species and protected fauna species. The assessment of vehicle strike risk has been based on a review of several information sources, including more recent studies than those quoted in the submission.

The rates of wildlife vehicle collisions for native fauna in Australia have been quantified over many studies, which consistently identify common species such as possums, macropods, small mammals, ravens and magpies as some of the most frequently killed native Australian animals resulting from wildlife vehicle collisions (Department of Transport and Main Roads 2024). Speed of vehicle has a strong positive relationship with rates of wildlife vehicle collisions across a wide range of regions (Department of Transport and Main Roads 2024). It is likely that increased vehicle movements, specifically at night, would increase the risk of vehicle strike, and the rate of wildlife vehicle collisions is typically higher when fauna activity coincides with periods of higher traffic volume, primarily around dawn and dusk (Visintin et al. 2018). This provides evidence upon which to base assumptions of likely vehicle strike impacts to various fauna groups. Therefore, it is considered that the conclusions made in the assessment are appropriate and are not required to be informed by additional local or contemporary strike data.

Appendix E (Revised biodiversity development assessment report) prepared for the Amendment Report provides an updated mitigation measure B22 to minimise the risk of impacts to biodiversity as a result of vehicle strike and so that the likelihood of vehicle strikes will not be greater than that assessed.

The Grey-headed Flying Fox is categorised as a dual credit species by the BAM (meaning it is identified as a species credit species and an ecosystems credit species). This species is a dual credit species to account for breeding habitat/camps (species credit) and foraging habitat (ecosystem credit). For this species, foraging habitat is broad ranging but breeding camps are localised and, if impacted, must be offset.

The Grey-headed Flying Fox was included in the biodiversity assessment of all assessed sub-regions and was recorded many times during project surveys. No camps were identified as being located within or adjoining the project impact area. The closest known Grey-headed Flying Fox camp location is at Millfield, approximately five kilometres away from the project impact area. Therefore, this species has been assessed as an ecosystem credit species, which means that impacts to its winter and spring foraging habitat is to be offset via the provision of ecosystem credits under the SODA.

The Yellow-bellied Glider is an ecosystem credit species and was recorded many times during project surveys. The species is allocated to ecosystem credits because it can be reliably predicted to use a site based on vegetation associations. Similarly to the Grey-headed Flying Fox, the Yellow-bellied Glider has been assessed as an ecosystem credit species, which means that impacts to its habitat are to be offset via the provision of ecosystem credits under the SODA.

General biodiversity impacts

Summary of issue

Hunter Wildlife Rescue raised concern regarding potential damage to wildlife habitat during construction of the HTP including habitat loss and connectivity, fragmenting movement corridors and increasing exposure to vehicle strike. Hunter Wildlife Rescue stated that potential biodiversity impacts may result in ecosystem level change including exacerbating the risk to threatened species.

Hunter Wildlife Rescue expressed particular concern for the Parma Wallaby (*Notamacropus parma*), Long-nosed Potoroo (*Potorous tridactylus*) and the Brush-tailed Rock-wallaby (*Petrogale penicillata*).

Response

EnergyCo acknowledges Hunter Wildlife Rescue's concerns regarding impacts on macropods and other terrestrial fauna and recognises the organisation's role in wildlife rescue and rehabilitation across the Hunter region. The EIS identified and assessed potential impacts to threatened macropod species and included avoidance and mitigation measures to minimise habitat loss and fragmentation. These include route refinements to avoid key habitats, staged clearing protocols, and fauna pre-clearance surveys as well as retention of movement corridors and vehicle strike management protocols. The assessment recognises the potential impact of the proposed transmission line in State forests on habitat connectivity, however, notes that this would be minimised through maintaining vegetation to a height of up to two metres within disturbance area B and no clearing zones along the alignment to facilitate wildlife connectivity for fauna species. This partial clearing approach would enable a gradual transition between the cleared easement and the surrounding forest or woodland, rather than an abrupt, hard edge. The 'no clearing zones' have been specifically defined to avoid impacts on gullies within State forests and nature reserves by stringing the lines at substantial distances and avoiding any clearing, where possible.

Impacts on habitat connectivity would be further managed through implementation of a connectivity strategy that will be developed to avoid and minimise impacts to connectivity for threatened species as required by mitigation measure B5 (refer to *section 8.7, Chapter 8 (Biodiversity)* of the EIS and *Appendix D (Updated mitigation measures)* of the Amendment Report).

Where impacts remain unavoidable the project will result in offsets outcomes via the SODA, which will include investment in conservation outcomes for the impacted species.

Impact on frogs

Summary of issue

Hunter Wildlife Rescue commended the general assessment approach for impacts on frogs and route refinements to avoid the high-risk artificial breeding ponds for Littlejohn's Tree Frog. However, Hunter Wildlife Rescue expressed concern that detail regarding specific impacts, threats, and

mitigation strategies was only provided for one of five threatened frogs species assessed in the EIS, the Littlejohn's Tree Frog. Hunter Wildlife Rescue also noted that some of the impacts listed as temporary may be long-term. While Hunter Wildlife Rescue acknowledged and commended survey efforts for threatened frog species, the submission requested that additional detail on impacts, threats, and mitigations measures are provided for all threatened frog species surveyed.

Response

Technical Report 1 – Biodiversity development assessment report provides an assessment of impacts on Giant Barred Frog, Giant Burrowing Frog, Red-crowned Toadlet and Stuttering Frog alongside Littlejohn's Tree Frog in section 8.1.5. Further detail on specific impacts, threats and mitigation strategies was provided for Stuttering Frog in section 9.1.3.4 of *Technical Report 1 – Biodiversity development assessment report* as it is listed as an SAll entity.

Appendix E (Revised biodiversity development assessment report) of the Amendment Report contains expanded and detailed information on the likely impacts to threatened species such as Littlejohn's Tree Frog, Stuttering Frog and Giant Burrowing Frog. As described in sections 9.1.3.5 and 9.1.3.6 of *Appendix E (Revised biodiversity development assessment report)* of the Amendment Report, particular focus on avoidance of impacts to frog species (particularly Littlejohn's Tree Frog and Stuttering Frog) has been applied to the greatest extent possible, including redesign of tower and related infrastructure locations and impacts. Importantly, the amended project has avoided 60 of 62 (or 96 per cent) of the recently constructed breeding ponds for Littlejohn's Tree Frog.

Additional specific commitments to continue to avoid or minimise impacts to threatened frog species has been included in the updated mitigation measures (refer to *Appendix D (Updated mitigation measures)* of the Amendment Report). This includes consideration of micro-siting to continue to avoid impact to amphibian breeding habitats during detailed design, potential inclusion of supplementary breeding ponds or connectivity measures in the design as well as specific erosion and sediment control measures that would be implemented to minimise indirect impacts.

Management and mitigation

Summary of issue

Hunter Wildlife Rescue noted that proposed mitigation and management measures have not appropriately considered managing the increased demand from fauna strike and the rescue responses associated with the construction and operation of the project. Specifically, Hunter Wildlife Rescue recommended that fauna vehicle strike and rescue procedures be understood by all HTP contractors and on-site construction personnel. Hunter Wildlife Rescue recommended specifically that vehicle strike, rescue, and relocation procedures be incorporated into relevant work health and safety documentation and training, onboarding protocols, and third-party contractor conditions of contracts.

Other measures to mitigate risks to macropods recommended by Hunter Wildlife Rescue include that the biodiversity management plan be prepared in consultation with Hunter Wildlife Rescue and identify Hunter Wildlife Rescue as a stakeholder in the fauna handling and rescue procedure, that appropriate signage is installed in high-risk areas, and that virtual fencing is installed along sections of road identified as high risk for fauna vehicle strike. Hunter Wildlife Rescue also provided

recommendations that EnergyCo liaise with NPWS and Hunter Wildlife Rescue such that fauna vehicle strike and rescue procedures are consistent with NPWS legislation and code of practice.

Hunter Wildlife Rescue raised additional concerns regarding the long-term viability of the proposed installation of nest boxes and other hollow creation methods without ongoing maintenance.

Specifically, Hunter Wildlife Rescue requested that EnergyCo explore all hollow creation methods, positioning, and designs such that hollows and nest boxes are specific to the species for which they are being created.

Hunter Wildlife Rescue expressed concerns over the adequacy of mitigation measures proposed for impacts to macropod species. Hunter Wildlife Rescue recommended that mitigation measures aim to promote the survivability, rehabilitation, and release of these species in the Hunter region.

Response

EnergyCo acknowledges Hunter Wildlife Rescue's concerns and values its experience in native animal care and rescue as well as the comprehensive recommendations provided regarding fauna rescue, vehicle strike mitigation, staff training and habitat replacement techniques. Hunter Wildlife Rescue's on-ground experience and data are valued contributions to ensuring the welfare of native fauna during project delivery.

As outlined in section 8.7, Chapter 8 (*Biodiversity*) of the EIS, several mitigation measures are proposed to manage potential fauna impacts during construction. These measures will be implemented in accordance with a BMP that will be prepared prior to the commencement of clearing works and would include (at a minimum):

- the location and extent of areas of vegetation clearance and habitat disturbance, and how these will be suitably demarcated on-site
- the location and extent of areas to be protected (e.g. retained vegetation, hollow-bearing trees, nests, burrows and other habitat features, including applicable buffers to habitat features) located inside the construction impact area or in close proximity to clearing areas
- pre-clearing survey procedures
- two-phase clearing process to allow fauna to move into adjoining habitat
- a threatened species unexpected finds protocol
- fauna handling and rescue procedure
- measures to be implemented on-site to clearly demarcate areas to be retained as 'no go areas'
- procedures for monitoring of partial clearance
- salvage of resources
- revegetation/rehabilitation plan (including seed collection where appropriate)
- controlling erosion
- bushfire management
- education of construction teams
- adaptive management procedures (including triggers)
- monitoring, evaluation reporting and compliance.

To address vehicle strike risk, *Appendix E (Revised biodiversity development assessment report)* prepared for the Amendment Report provides an updated mitigation measure B22 to minimise the risk of impacts to biodiversity as a result of vehicle strikes.

EnergyCo supports in-principle the inclusion of Hunter Wildlife Rescue's contact details on relevant wildlife signage where feasible and subject to agency approval.

The potential use of virtual fencing and other innovative mitigation measures will be reviewed in consultation with biodiversity specialists as part of preparation of the BMP.

Loss of nesting hollows for hollow dependant fauna will be managed through mitigation measure B6 through the development and implementation of a supplementary hollow and nest strategy.

The project will continue to consult with relevant wildlife organisations, including Hunter Wildlife Rescue, where appropriate during implementation of the BMP to support coordinated fauna-rescue responses and inform the approach to management of biodiversity impacts.

Biodiversity offsets

Summary of issue

Hunter Wildlife Rescue raised concern that the biodiversity offset strategy delivered by the SODA is not available for public comment. Hunter Wildlife Rescue specifically expressed that biodiversity offsets ought to include programs that support native habitat conservation in perpetuity, and that habitat offsets are like-for-like for the residual impacts that could not otherwise be avoided, minimised, or mitigated. Furthermore, Hunter Wildlife Rescue requests that offsets fund specific conservation actions within the Hunter Valley that work to protect, restore, rehabilitate, and promote the health of native fauna and flora. Hunter Wildlife Rescue also requested additional information on the following with respect to the biodiversity offset strategy delivered by the SODA:

- When will the SODA be signed and funds transferred to NSW DCCEEW?
- What is the status of the regional conservation investment strategy and how will it work in the context of the HTP?
- The supply of land to satisfy like for like offsets is challenging. Will the regional conservation investment strategy work differently to manage this risk?
- How can local groups, like Hunter Wildlife Rescue, provide input into the plan for implementation of biodiversity offsets?
- How can local groups, like Hunter Wildlife Rescue, access and benefit from HTP-related biodiversity offsets?

Response

EnergyCo acknowledges Hunter Wildlife Rescue's interest in continued engagement and biodiversity outcomes and appreciates its contribution to community discussions regarding wildlife welfare and biodiversity.

EnergyCo intends to enter into a SODA with NSW DCCEEW who would have the responsibility for delivering biodiversity offsets for the project. Should the project be approved, the details of the SODA for the project will be provided on the NSW DCCEEW website.

As per clause 6.3A(1) of the Biodiversity Conservation Regulation 2017, a SODA with the Environment Agency Head (of NSW DCCEEW) may be entered into by the applicant or proponent of a major project development after the development consent for, or approval of, the development is given. As such, assessment of the project cannot be paused until a SODA is developed, as a SODA is required to be developed following project approval.

A SODA must require the Environment Agency Head to carry out the retirement of like-for-like biodiversity credits and/or the funding of a biodiversity conservation action that would benefit the relevant threatened species or ecological communities.

Since preparation of the EIS, the CIS has been prepared and published by NSW DCCEEW. This strategy will underpin the implementation of the SODA for the project and guide the priority areas and actions for investment that are identified for the Hunter region. The CIS has been developed to:

- integrate conservation programs and priorities to optimise delivery of regional conservation outcomes
- protect regionally significant conservation values
- improve ecological connectivity and resilience to climate change
- restore degraded ecosystems and habitats
- contribute to a comprehensive, adequate and representative protected area system
- deliver social benefits for the region.

The CIS recognises the need to work with organisations as well as landowners to encourage activities that could contribute to Hunter region conservation priorities.

6.14.4 Land use and property

Compensation for property impacts

Summary of issue

Hunter Wildlife Rescue requested they be compensated for the acquisition of the land which has had a negative impact on the Hunter Wildlife Rescue operations, including access to a macropod release pen. Hunter Wildlife Rescue specifically requested more information on the SODA as a potential means through which compensation can be paid for negative impacts to Hunter Wildlife Rescue operations.

Response

EnergyCo will work with Hunter Wildlife Rescue to support the relocation of directly affected wildlife care and soft release pen facilities within the local area and to respond to increased demand in wildlife care services from construction of project. This commitment is reflected in an additional mitigation measure S08 (refer to *Appendix D (Updated mitigation measures)* of the Amendment Report).

The SODA is not the mechanism through which compensation for negative impacts on the Hunter Wildlife Rescue operations would be delivered. Further information on the SODA is provided in *section 5.5.5, Chapter 5 (Response to community submissions)* of this Submissions Report.

6.14.5 Social

Impacts on community

Summary of issue

Hunter Wildlife Rescue noted the increased demand for local native animal rescue services during construction and potential risks to volunteer safety. Hunter Wildlife Rescue noted the need for contingency planning and recognition of the economic value of volunteer wildlife care.

Response

The project will explore opportunities to support local wildlife rescue organisations, including Hunter Wildlife Rescue. This is reflected in an additional mitigation measure S08, which requires investigation of opportunities to assist wildlife carers and organisations including Hunter Wildlife Rescue to respond to increased demand in wildlife care services from construction of project (refer to *Appendix D (Updated mitigation measures)* of the Amendment Report).

6.15 Millfield Community Association

The Millfield Community Association provided a submission in response to the public exhibition of the EIS. The submission outlined concerns regarding the consultation undertaken for the project and frustration over observed inconsistent project information, particularly regarding the height of transmission towers, construction traffic, and the justification for the route alignment near Millfield. This section provides a summary of the issues raised and consideration of those issues.

6.15.1 Alternatives and options

Transmission line design – alignment alternatives

Summary of issue

The submission questioned the justification for the current transmission line alignment, arguing that EnergyCo's decision-making lacked transparency. Residents found it difficult to accept that no feasible alternatives existed that would have allowed the transmission line to be located further away from residential areas and community facilities. They requested further explanation and disclosure of the route selection process and assessment criteria used to eliminate alternative corridors.

Response

EnergyCo acknowledges the matters raised by the Millfield Community Association regarding the transparency of the route selection process and the justification for the preferred transmission line alignment, including requests for further explanation of the assessment of alternative corridors and the criteria used to inform alignment decisions.

A detailed description of the alternatives considered for the project and the justification for the preferred transmission line alignment is provided in *Chapter 3 (Alternatives and options)* of the EIS.

The alternatives analysis followed a holistic, multi-criteria assessment that considered impacts to people and the environment, technical feasibility, and cost.

Corridor alternatives were identified based on EnergyCo's planning pillars and project objectives developed specifically for the HTP. EnergyCo's key planning pillars guide the corridor selection process for its projects in NSW. These pillars and principles align with the requirements of the NSW *Electricity Infrastructure Investment Act 2020* and were presented in *Table 3.3* of the EIS.

The project objectives included maximising the use of mines, suitable public land and electricity easements; minimising significant land use conflicts and impacts on people and the environment; minimising hazards and risks; building community support; and delivering the project on time and at reasonable cost for consumers. Three strategic corridors were selected (North, Central, South) with 19 route options identified and assessed, as outlined in *section 3.3* of the EIS. Route option South A was selected as the preferred route for the HTP (refer to *section 3.3* and *section 3.4* of the EIS).

Three transmission alignment alternatives (Alignment A, B and C) within route option South A were then assessed against the project objectives and key technical, environmental, community and cost considerations, as outlined in *section 3.5* of the EIS. Alignment A was identified as the preferred alignment for the HTP.

In response to community feedback and further technical and environmental investigations (including biodiversity, heritage, landscape and visual, surface water, flooding and bushfire), several adaptations and improvements were made to the preferred alignment for the project. Ahead of public exhibition of the EIS, EnergyCo published feedback reports including *Shaping the Hunter Transmission Project* in May 2024 and an updated report *Refining the Hunter Transmission Project* in December 2024 to outline the refinement process for the HTP. The refinements were also detailed in *section 3.6* of the EIS.

EnergyCo acknowledges that in some locations competing environmental, social and technical constraints occur. In these instances, EnergyCo has adopted a balanced and transparent approach to determine the most appropriate alignment, ensuring that decisions are informed by data, and in consultation with affected stakeholders.

Alternate options for the preferred alignment were investigated near Millfield, further to the west toward Cedar Creek Road. These options were considered primarily to avoid impacts on Millfield. However, the options to the west were limited by significant topography and access constraints. These limitations prevented the selection of an alignment to the west. The preferred alignment was the only technically feasible option in the topographically steep area between Pokolbin State Forest and Corrabare State Forest.

In selecting the preferred transmission line alignment, a key consideration was to minimise visual impacts. Where possible, the transmission towers would be set back from the main ridgelines rather than being placed on the top to reduce visual impacts from Millfield.

6.15.2 Project description

Transmission tower heights

Summary of issue

The submission raised concern about inconsistent information provided to residents regarding the height of transmission towers, with different sources citing figures ranging from 70 to 85 metres. This inconsistency has created confusion and uncertainty for the Millfield community about the visual and environmental impacts of the project. The community requested a clear and definitive statement from EnergyCo confirming the final tower heights for the section of the HTP affecting their area.

Response

EnergyCo acknowledges the matters raised by the Millfield community regarding information about transmission tower heights and the resulting uncertainty about potential visual and environmental impacts, and the request for clarity on the anticipated tower heights for the section of the HTP in the Millfield area.

The following information on transmission towers was included in the EIS:

- the new transmission lines would be supported on a series of transmission towers
- the transmission towers would consist of free-standing steel lattice towers.
- the height of most of the transmission towers would be up to 75 metres, with some instances up to 85 metres
- the specification of each transmission tower would be dependent on a range of factors such as the distance between each structure, structure loading, required vegetation clearances, transmission line voltage, changes in direction of the transmission line route, local geotechnical conditions, topography, and local environmental constraints (such as the need to avoid specific areas of biodiversity value or to span watercourses).

The visual impact assessment presented in the EIS assessed a transmission tower height of 85 metres as a worst-case scenario (refer to *Chapter 10 (Landscape and visual)* and *Technical Report 3 – Landscape character and visual impact assessment*). This included assessment of impacts to public viewpoints as a result of permanent project infrastructure, including transmission towers. Public viewpoints 08 and 09 as part of the visual impact assessment were located on Wollombi Road (looking east and west, respectively). These provide an indication of views of the project from the Millfield area. The visual impact assessment demonstrated that viewpoint 08 would experience a low visual impact, and viewpoint 09 would experience a very low visual impact. This indicates that, even with a worst-case assumption around transmission towers being 85 metres tall, visual impacts from public viewpoints in Millfield would be low or very low and no mitigations would be required (in line with *Transmission Guideline – Technical supplement for landscape character and visual impact assessment* (the technical supplement) (DPHI 2024)).

Technical Report 3 – Landscape character and visual impact assessment also assessed the potential impacts to private viewpoints, including those in Millfield, using the worst-case scenario of 85-metre-tall transmission towers. *Section 6.3.1* of the assessment summarises the visual impacts to private viewpoints in line with the *Transmission Guideline, Technical supplement for landscape*

character and visual assessment (DPHI 2024), as updated in April 2025, with all assessed private viewpoints in Millfield determined to have low or no visual impacts.

Final tower heights in specific locations will be determined during the detailed design of the HTP, however, these would be a maximum of 85 metres tall in line with the EIS.

In response to further requests from the community, photomontages were created for two additional public viewpoints located at the outskirts of Millfield (Sixth Avenue) and on Mount View Road. An aerial perspective photomontage was also completed for Millfield. Refer to *section 5.7.1, Chapter 5.7.1 (Response to community submissions)* of this Submissions report for further discussion on landscape and visual impacts on Millfield.

6.15.3 Engagement

Consultation on the project – general

Summary of issue

The submission raised concern about inconsistent and unclear information provided to the Millfield community during earlier engagement, noting that variations in project details (such as tower heights and road upgrades) have caused confusion and contributed to a loss of trust. Millfield Community Association requested clearer communication and more transparent engagement as the project progresses.

In addition, Millfield Community Association urged the project team to improve transparency and engagement with the Millfield community, including attendance at a local meeting to directly address these concerns and provide clear, consistent information about the project's scope and timing.

Response

EnergyCo acknowledges the need for clear and timely information as the project progresses. Engagement with Millfield residents and Millfield Public School has occurred at key points during development of the EIS and since EIS exhibition, including meetings and briefings during EIS exhibition, and the concerns raised have been considered in preparing this Submissions Report and the Amendment Report.

As the project moves into detailed design, the project will continue to provide updated information through appropriate channels, including direct briefings, community updates and targeted meetings where required. This will include explaining any refined design elements, access requirements and potential construction impacts once they are confirmed.

During construction, the network operator and design and construct contractor(s) will maintain ongoing communication with affected residents, community groups and key stakeholders to ensure they receive accurate, consistent and accessible information about upcoming works, timing and safety considerations.

6.15.4 Traffic and transport

Traffic impacts – construction

Summary of issue

Residents raised concern about the understated impacts of construction traffic on Wollombi Road, which is expected to experience a major increase in heavy vehicle movements due to a proposed construction support site nearby. The submission noted that the local road network is not designed for high volumes of heavy traffic, particularly given the proximity of Millfield Public School. It also questioned contradictory project messaging, noting that earlier communications had indicated road widening works were unrelated to the HTP, while recent statements from project representatives now suggest otherwise.

The submission also sought a detailed and transparent traffic management plan to address community safety concerns during construction. It requested confirmation of construction routes that avoid Millfield Public School on Wollombi Road, restrictions on the number and timing of daily heavy vehicle movements, and specific measures to protect pedestrians and school zones throughout the construction period. Residents also called for a formal commitment from EnergyCo to promptly repair any road damage caused by project-related traffic.

Response

EnergyCo acknowledges the matters raised by residents regarding potential construction traffic impacts on Wollombi Road, including concerns about heavy vehicle movements, road safety near Millfield Public School, the consistency of project communications, and the need for clear construction traffic management and road maintenance commitments.

A traffic impact assessment was prepared to support the EIS for the project and was included as *Technical Report 4 – Traffic and transport impact assessment* of the EIS and summarised in *Chapter 11 (Traffic and transport)*. As detailed in section 3.6 of the *Technical Report 4 – Traffic and transport impact assessment*, the quantitative assessment involves forecasting ‘worst case’ construction traffic movements likely to be experienced along the construction routes within the traffic and transport study area. The worst case scenario represents the peak construction period in 2028. Not all construction access routes would be used for the entire construction period, and construction traffic volumes on any particular construction access route would fluctuate (reduce) according to the time of day and the stage of construction. As such, the predicted heavy vehicle movements predicted on Wollombi Road constitute the maximum heavy vehicle movements.

The following upgrades on Wollombi Road are:

- Wollombi Road / access road to the Wollombi Road construction support site
- Wollombi Road / Mount View Road (Millfield)
- Wollombi Road / Hayes Road
- Wollombi Road / new access track.

Since EIS exhibition, additional assessment has been undertaken of the traffic and transport impacts from the project as result of the proposed amendments and refinements and to include an assessment scenario where the HTP peak volume occurs during the AM and/or PM network peak (refer to *Appendix H (Revised traffic and transport impact assessment)* of the Amendment Report).

Further details on the treatments required at each intersection, and other relevant mitigation measures can be found in *section 5.3.12 of Appendix H (Revised traffic and transport impact assessment)* of the Amendment Report.

Appendix D (Updated mitigation measures) of the Amendment Report outlines mitigation measures to address community concerns relating to strain on roads. Prior to construction, a pre-construction road dilapidation surveys and routine inspections (mitigation measure TT6). The surveys and inspections will be completed along all nominated construction routes on local roads. Where rectification works are required due to project impacts, consultation with the appropriate road authority will be undertaken to confirm the scope of the work required. The intention of these surveys and inspections will be to identify any required upgrades and complete the upgrades prior to construction.

Construction impacts on road conditions have been assessed in *Appendix H (Revised traffic and transport impact assessment)* of the Amendment Report. The regional roads within the study area have been built to accommodate medium to high volumes of traffic and their pavement and cross sections have especially been built for high proportions of heavy vehicle use. The Wollombi Road construction support site would generate a maximum of 335 heavy vehicle movements on a daily basis which equates to 11.2 per cent of total daily traffic of 2,983 vehicles on Wollombi Road. The percentage increase of vehicles due to construction traffic would have a minor impact on pavement condition.

A traffic management plan and traffic control plans (outlined in TT1) will consider roads safety, especially around sensitive sites such as schools and will be developed in consultation with the relevant road authorities. The traffic management plan will also include a driver code of conduct to define acceptable driver behaviour, promoting road safety and minimising the impacts of construction related vehicle movements on local roads and community. This will govern the way that construction workers are required to drive, including adhering to speed limits etc. Where required for road upgrades, traffic management will be in place to police speed limits, including for general public. A community communication strategy (S02) will provide mechanisms for communication and engagement during construction with key stakeholders (including businesses and Millfield Public School), including feedback mechanisms and engagement with tourism and recreational operators to minimise disruptions and support continuity of their operations during construction. A new mitigation measure (S09) also provides for the investigation and implementation of measures to minimise the perceived safety risk from construction vehicles in the vicinity of Millfield Public School.

The Hunter-Central Coast Regional Reference Group will also continue to operate during construction, which has representatives from the community, business and local councils.

6.16 Millfield Public School

Millfield Public School provided a submission in response to the public exhibition of the EIS on an unspecified date. The submission expressed concern about a lack of consultation undertaken with the school and of the potential safety, operational, and wellbeing risks for students, staff, and the local community arising from construction of the project. This section provides a summary of the issues raised and consideration of those issues.

6.16.1 Engagement

Consultation on the project – general

Summary of issue

Millfield Public School expressed concerns about inadequate early consultation on the HTP. The school noted it only became aware of the project's scale and timelines shortly before EIS exhibition closed, limiting its ability to respond or engage with parents. The school requested direct engagement with EnergyCo and DPHI, development of a mitigation plan addressing student safety (including fencing, crossings, traffic controls, and carpark improvements), and better management of construction traffic during school hours. It also sought extended community engagement beyond the 28-day exhibition period.

Response

EnergyCo acknowledges the concerns raised by Millfield Public School regarding consultation, communication and student safety. Initial engagement occurred during the EIS exhibition period in September 2025, when EnergyCo met with the school and provided project information. Prior to this, correspondence had been issued through the school's general inbox as part of the broader notification process, rather than through personalised or direct contact.

Since EIS exhibition, EnergyCo has undertaken additional meetings with Millfield Public School from October 2025 through to February 2026 to progress discussions on student safety, access, traffic management and broader operational needs. EnergyCo will investigate and implement measures to minimise the perceived safety risk from construction vehicles in proximity to Millfield Public School, as per new mitigation measure S09 (refer to *Appendix D (Updated mitigation measures)* in the Amendment Report.

EnergyCo will continue to engage with Millfield Public School, Cessnock City Council and the NSW Department of Education to ensure student safety, accessibility and clear communication remain central considerations in planning and delivery of the Hunter Transmission Project.

6.16.2 Traffic and transport

Traffic impacts – construction

Summary of issue

The submission identified significant risks associated with increased construction traffic along Wollombi Road and Mount View Road, where the school is located. It noted that the road already presents visibility challenges and lacks a formal carpark, making access difficult during peak times. Millfield Public School is concerned that the projected increase in heavy vehicle movements during school hours is expected to heighten congestion, reduce emergency access reliability, and increase the likelihood of traffic incidents near the school.

The school also raised serious concerns about student safety and containment risks. It explained that existing fencing is insufficient to prevent students, particularly those with learning support needs, from leaving the school grounds. With increased traffic volumes and perceived higher vehicle speeds, the potential for accidents would rise substantially. The submission called for fencing upgrades, new crossings, and traffic management measures to ensure that student safety and wellbeing are not compromised during construction.

Response

EnergyCo acknowledges the safety concerns regarding school children on Wollombi Road at Millfield Public School. Road safety, especially around sensitive sites such as schools, would be considered in the detailed traffic management plan and traffic control plans that will be developed in consultation with the relevant road authorities (refer TT1). The traffic management plan will also include a driver code of conduct to define acceptable driver behaviour, promoting road safety and minimising the impacts of construction related vehicle movements on local roads and community. This will govern the way that construction workers are required to drive, including adhering to speed limits, etc. Where required for road upgrades, traffic management will be in place to police speed limits, including for the general public.

In consultation with Millfield Public School, EnergyCo has committed to investigate and implement safety measures such as improvements to the school carpark and perimeter fence as well as controlled pedestrian crossing at school drop offs and pick ups during construction. Refer to *Appendix D (Updated mitigation measures)* of the Amendment Report.

The community and communications strategy (mitigation measure S02) has been updated to recognise Millfield Public School as a key stakeholder and includes targeted consultation with Millfield Public School. As part of the strategy, real time traffic monitoring would be implemented for stakeholders that may be affected including Millfield Public School.

As mentioned in *section 6.18.1* of this Submissions Report, a school safety and access plan will be prepared to further address student safety, access and traffic management for Millfield Public School.

6.16.3 Social

Impacts to surroundings (amenity)

Summary of issue

Millfield Public School advised that limited parking and lack of sealed all-weather surfaces already constrain parent and staff access, particularly during wet weather. Construction activity, combined with increased traffic volumes, dust, noise, and vibration, could further disrupt daily operations and affect student learning and staff wellbeing. The submission noted that the potential for continuous or extended construction periods would create additional uncertainty about maintaining safe and effective school operations over multiple years.

Response

EnergyCo acknowledges the matters raised by Millfield Public School regarding potential amenity impacts during construction, including access constraints, traffic, dust, noise and vibration, and the implications of prolonged construction activities on school operations, student learning and staff wellbeing.

The air quality assessment (refer to *Chapter 22 (Other matters)* of the EIS and *Technical Report 18 – Air quality and greenhouse gas impact assessment* evaluated potential impacts from dust and vehicle emissions during construction of the project. The assessment followed the *Guidance on the Assessment of Dust from Demolition and Construction*, which uses a risk-based method to consider amenity, health and ecological effects (IAQM 2024).

The Hayes Road laydown area is approximately 600 metres from the Millfield Public School. Dust impacts were assessed for sensitive receivers within 250 metres of this laydown area. According to IAQM guidance, dust impacts from construction activities, including track out from construction vehicles of dust onto roads beyond this distance, are considered to be negligible. As such, dust impacts at Millfield Public School from activities at the Hayes Road laydown area are anticipated to be negligible. Notwithstanding, management measures AQ1, AQ2, AQ4 will be implemented to minimise the risk of dust impacts from this site at nearby receptors like Millfield Public School.

To manage dust and particulate emissions, a construction air quality management plan (CAQMP) will be prepared as part of the construction environmental management plan. The CAQMP will incorporate the mitigation measures recommended in the technical assessment and will be implemented by the construction contractor. The proposed mitigation measures are considered sufficient to minimise dust generation and avoid adverse health or amenity impacts on nearby residents, schools and other sensitive receivers.

A road traffic noise assessment was undertaken as part of *Technical Report 11 – Noise and vibration impact assessment* (refer to *section 16.3.5, Chapter 16 (Noise and vibration)* of the EIS). The construction road traffic noise impacts have been reassessed in response to the amendment to the construction support site at Wollombi Road to include temporary worker accommodation. The outcomes of this reassessment is presented in *Appendix K (Noise and vibration impact assessment addendum)* of the Amendment Report and *section 5.10.3, Chapter 5 (Assessment of impacts)* of the Amendment Report for further details. Construction traffic is likely to result in a noticeable (more than 2 dB) increase in noise levels on Wollombi Road, East of Cedar Creek Road, during the night-time period, however road traffic noise levels on Wollombi Road during the daytime are not

predicted to increase by more than 2 dB. An increase of up to 2 dB represents a minor impact that is considered barely perceptible to the average person. As such construction related traffic is not predicted to impact on the learning environment at Millfield Public School during the daytime when the school is in use. Nonetheless, noise management measures (NV6) would be employed to minimise the potential for noise disturbance from construction traffic including limiting traffic movements to daytime periods as far as reasonable and feasible (refer to *Appendix D (Updated mitigation measures)* of the Amendment Report). Additionally, as mentioned above, a community and communications strategy (mitigation measure S02) has been updated to include the implementation of real time traffic monitoring would be implemented for stakeholders that may be affected including Millfield Public School (refer to *Appendix D (Updated mitigation measures)* in the Amendment Report).

As noted in *section 4.4.6, Chapter 4 (Project description)* of the EIS, construction of the project would generally be carried out during recommended standard hours as defined by the Interim Construction Noise Guideline (NSW Department of Environment and Climate Change (DECC) 2009)), being Monday to Friday, 7am to 6pm, and Saturday 8am to 1pm). Worker accommodation facilities would be operational 24 hours per day, seven days per week, however this will be for occupancy rather than associated with any construction related activities on site.

Impacts on community

Summary of issue

The submission stated that Millfield is a small but growing community and that the school serves as an important social and educational hub. It noted that large infrastructure projects should consider both short-term and long-term implications for community wellbeing and school viability. The school requested that planning for the HTP address not only immediate safety and access concerns but also the broader legacy impacts on Millfield's families, local infrastructure, and social cohesion.

Response

EnergyCo acknowledges the importance of Millfield Public School and the need to mitigate any impacts from the project to its operation.

Millfield Public School was identified in *Technical Report 6 – Social impact assessment* as being within the corridor social locality and a sensitive location along the project's key transport routes where construction traffic could intersect with vulnerable road users.

Since the public exhibition of the EIS, the proposed reconfiguration of the Wollombi Road construction support site has identified the potential for additional impacts on Millfield Public School due to changes in the location and nature of construction and workforce activity in the vicinity of the school. As such, additional targeted engagement has been undertaken with Millfield Public School representatives to understand their concerns and inform the assessment of the proposed amendments in *Appendix I (Social impact assessment addendum)* of the Amendment Report.

6.17 Mindaribba Local Aboriginal Land Council

The Mindaribba Local Aboriginal Land Council (LALC) provided a submission in response to the public exhibition of the EIS (24 September 2025). The submission outlined concerns regarding the lack of consultation undertaken in relation to biodiversity and ecological values, noted as a significant aspect of intangible heritage and Aboriginal Peoples's connection to Country. The submission also raised concerns with respect to how Aboriginal heritage impacts were assessed and requested detail on the biodiversity offset scheme. This section provides a summary of the issues raised and consideration of those issues.

6.17.1 Engagement

Consultation during project development

Summary of issue

Mindaribba LALC expressed concern about the lack of information relating to the list of Registered Aboriginal parties (RAPs) that were consulted for the project, as well as evidence of consultation with these RAPs. The submission noted there is limited evidence of how consultation undertaken with Aboriginal people during project development has informed amendments to the project corridor, tower siting, or construction methods. The submission requests additional detail on specific outcomes from consultation with Aboriginal Peoples.

In addition, Mindaribba LALC notes their concern about the lack of consultation during project development with respect to disturbance of flora and fauna and traditional totemic connections to these totemic beings which comprise an aspect of intangible Aboriginal cultural heritage value.

Response

EnergyCo acknowledges Mindaribba LALC's concerns regarding consultation undertaken during the development of the EIS. With regard to evidence of consultation undertaken with Aboriginal people throughout the project, all consultation undertaken with the registered Aboriginal parties is presented in *Appendix B of Technical Report 2 – Aboriginal cultural heritage assessment*. This includes a table of all correspondence and summary of its content, and extended presentation of documents received and minutes of meetings undertaken. While this appendix is not presented in the public version of the *Technical Report 2 – Aboriginal cultural heritage assessment*, it has been provided to all registered Aboriginal parties, including the nominated representative for Mindaribba LALC, during the finalisation of *Technical Report 2 – Aboriginal cultural heritage assessment* prior to EIS exhibition. The *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report has also been provided to the nominated representative for Mindaribba LALC prior to the finalisation of *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report.

Consultation with Traditional Owners has contributed to design refinements throughout the scoping and EIS phases of the project. As outlined in *section 3.6.2, Chapter 3 (Alternatives and options)* of the EIS, refinements to the transmission line alignment have been made to avoid and minimise impacts to culturally significant Aboriginal sites and locations, both tangible and intangible, wherever feasible, since initial discussions began with Traditional Owners in late 2023. Key refinements to the transmission line alignment to avoid Aboriginal sites and places have included:

- the relocation of transmission towers off prominent ridgelines and hilltops, moving them onto upper slopes to reduce visual prominence from culturally significant lookouts
- adjustments to increase distances from key rockshelters off Broken Back Trail in Pokolbin State Forest, as well as realignments eastwards to avoid a number of identified rockshelters and stone arrangements in Corrabare State Forest
- diversion of the alignment in State Forest of the Watagan Mountains to avoid indirect impacts to significant rockshelters and to reduce visual impacts from Flat Rock Lookout
- adjustments to minimise indirect impacts to the Abbots Fall cultural landscape and associated grinding groove site in Olney State Forest.

Design workshops were undertaken between the project design team and Aboriginal heritage specialists to explore refinements to reduce potential direct impacts to Aboriginal heritage. On-site validation as part of the EIS consisted of a field program conducted over a 30-week period, including pedestrian survey and test excavation by archaeologists and RAPs. This extensive process has been integral in refining the project, ensuring that the transmission line alignment and design have been carefully adjusted to minimise impacts while respecting cultural heritage.

Consultation with RAPs and continued design refinement have contributed to the commitment to avoid 20 high and moderate significant Aboriginal objects, sites and places as outlined in the *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report, including rockshelters with art motifs and cultural deposits, grinding grooves, stone arrangements and cultural places (an increase from five in *Technical Report 2 – Aboriginal cultural heritage assessment* of the EIS). In addition, the project will investigate the micro-siting of project infrastructure and construction activities in consultation with an Aboriginal heritage specialist and Wonnarua, Awabakal and Darkinjung Traditional Owners to avoid or minimise impacts to all identified Aboriginal objects, sites and places within the project impact area (refer to mitigation measure AH03 in *Appendix D (Updated mitigation measures)* of the Amendment Report).

With regard to consultation during project development on disturbance of flora and fauna, extensive efforts to explore cultural values were undertaken as part of *Technical Report 2 – Aboriginal cultural heritage assessment* (refer to *Chapter 7 (Cultural values mapping)* of *Technical Report 2 – Aboriginal cultural heritage assessment*). This included early consultation and co-design workshops with key Traditional Owners, as well as a project specific cultural values mapping study, with the latter including extensive engagement with 14 Elders and Traditional Owners specifically to discuss Dreaming and traditional and contemporary values within and near the project impact area. All RAPs, including Mindaribba LALC, were asked to nominate individuals to participate in this study, which was an opportunity to discuss flora and fauna and traditional totemic connections to these totemic beings. No response was received from Mindaribba LALC. Notwithstanding, flora and fauna values were discussed as part of the cultural values mapping study, with two sites identified through the cultural values mapping investigations (HTP-C-AR01 and HTP-C-AR02) anticipated to

be impacted as a result of vegetation removal. Both HTP-C-AR01 and HTP-C-AR02 are patches of natural flora resources used by Aboriginal people in the past but reflect species that would be expected to occur across the State forests and broader region. Their loss reflects the Aboriginal participants interest in traditional ecological knowledge, but neither site is rare. *Appendix E (Post approval requirements – updated guiding principles)* of *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report includes recommendations for a co-design approach and methods to be developed and agreed with the Awabakal Traditional Owners and Forestry Corporation of NSW on the recovery, relocation and/or future management of relevant ecological species within these sites.

Future community and stakeholder engagement

Summary of issue

The submission raised concern that engagement undertaken to date did not fully acknowledge or reflect Mindaribba LALC's ecological and cultural connections to Country and requests opportunities for future engagement to promote project and design outcomes that reflect First Nations worldviews of Country as a living cultural entity. The submission expressed an ongoing expectation that future engagement will be grounded in cultural knowledge and not limited to discussions of tangible heritage only. Furthermore, Mindaribba LALC expressed that EnergyCo can achieve positive social and economic outcomes achieved through working within the operational sphere of LALCs and other Aboriginal organisations. Requests and recommendation for future engagement include:

- that an Aboriginal Cultural Advisory Group be created with Mindaribba LALC nominated representatives to advise on micro-siting of transmission tower locations, access track locations, and construction sequencing
- request for a joint technical workshop (including Mindaribba LALC, other Aboriginal knowledge holders and Elders, EnergyCo heritage team, EnergyCo ecologists, Birdlife Australia representatives, DPHI, Heritage NSW) to advise on tangible and intangible cultural concerns in the project corridor and agree design changes
- a joint meeting between EnergyCo personnel and Mindaribba LALC to discuss serious and irreversible impact risks for specific TECs and species, and describes route refinements that avoided high value habitat
- request that EnergyCo demonstrate alignment with the Minister's First Nations Consultation Guidelines and NSW Government's Closing the Gap Strategy with respect to employment and income opportunities for local Aboriginal communities
- request that employment and income opportunities for local Aboriginal communities are accompanied by appropriate and specified targets and reporting in accordance with EnergyCo First Nations Guidelines
- request that future engagement promotes shared governance and transparent benefit pathways for Aboriginal Peoples.

Response

EnergyCo acknowledges Mindaribba LALC's request for deeper, ongoing engagement that reflects cultural and ecological connections to Country and notes the specific recommendations for future involvement in technical discussions, cultural values input, biodiversity considerations, governance pathways and social and economic opportunities.

EnergyCo will continue to engage with Mindaribba LALC as the project progresses, including through further joint technical discussions to share information, raise concerns and provide advice. Any recommendations from these forums will be documented and considered through EnergyCo's established design and assessment processes, noting that potential refinements must also consider engineering, safety and statutory requirements.

EnergyCo also acknowledges Mindaribba LALC's expectations regarding alignment with First Nations consultation guidelines, employment and income opportunities for local Aboriginal communities, and transparent future engagement pathways. These matters will continue to be progressed through EnergyCo's broader First Nations engagement program and in partnership with relevant Aboriginal organisations.

6.17.2 Biodiversity

Biodiversity impacts, management and offsets

Summary of issue

The Mindaribba LALC expressed concern with respect to how impacts to the Regent Honeyeater will be managed, noting that they have been part of the Regent Honeyeater Recovery Team since 2020 with other stakeholders. Specifically, Mindaribba LALC requested information on the following:

- location of known or likely Regent Honeyeater habitat (breeding, foraging, movement corridors) that occur within or adjacent to the project impact area
- whether high value feed trees have been identified and whether design has been modified to avoid these
- timing of construction activities to avoid periods critical for breeding or peak flower nectar availability
- whether specific restoration or revegetation of habitat used by the Regent Honeyeater will be undertaken to improve connectivity
- whether a long-term monitoring program specific to the Regent Honeyeater will be implemented
- requests that offset sites for the Regent Honeyeater are selected in consultation with species experts and Mindaribba LALC Elders and Knowledge Holders and are like-for-like. The submission specifically recommends developer owned lands at Kurri Kurri that should be vested in the Mindaribba LALC Aboriginal Community into perpetuity.

Additionally, Mindaribba LALC requested additional detail on how species level impacts were assessed in *Technical Report 1 – Biodiversity development assessment report* of the EIS, including habitat survey methodology, and whether targeted surveys were undertaken for the species, including associated results. The submission also requests clarity on whether Serious and Irreversible Impact determinations were triggered for the Regent Honeyeater.

The submission requested additional information on the SODA including a finalised set of offset sites/credits that will be retired through the SODA. Specifically, Mindaribba LALC requested clarification on how the SODA will be delivered to assist the Regent Honeyeater and Swift Parrot along with other woodland birds impacted by the project. The submission also requested information on how the SODA will benefit Aboriginal landowners and how it will interact with freehold land owned by the Mindaribba LALC and the *Native Title Act 1993* (Cth).

Response

EnergyCo acknowledges the matters raised by Mindaribba LALC regarding the assessment and management of impacts to the Regent Honeyeater, including requests for further detail on habitat identification, avoidance and mitigation measures, survey methodology, offset delivery, and the integration of Aboriginal knowledge and consultation into species-specific management and offset arrangements.

As described in *section 8.2, Chapter 8 (Biodiversity)* of the EIS, during the selection of the HTP corridor, EnergyCo sought to avoid and minimise the project's impacts on biodiversity. Importantly, high conservation value areas such as Watagans National Park, Werakata National Park, Warrawolong Flora Reserve and existing biodiversity offset areas were avoided. Additionally, the better-quality remnants of the Central Hunter Valley Eucalypt Forest and Woodland and Warkworth Sands Woodland of the Hunter Valley TECs that provide habitat for threatened species and important habitat for the Regent Honeyeater and Swift Parrot were also avoided. Following the corridor selection, an iterative design process based on field survey results was undertaken to further avoid and minimise the project's impacts on biodiversity.

Section 9.1.3.1 of Technical Report 1 – Biodiversity development assessment report and Appendix E (Revised biodiversity development assessment report) of the Amendment Report provide a detailed impact assessment for Regent Honeyeater as it is identified as a threatened fauna species at risk of a Serious and Irreversible Impact. This section also provides more specific discussion on how impacts on its habitat has been avoided and minimised during project development.

Under the BAM, the Regent Honeyeater is a dual credit species, assessed for species credits (via an important habitat map) and ecosystem credits (all other areas the species is likely to occur). No survey is required if the subject land is on an important habitat map for a species unless the species profile in the NSW Bionet Threatened Biodiversity Profile Data Collection states otherwise. The species is considered present and the part of the subject land that is within the important habitat map forms the species polygon used to generate species credits. Any remaining habitat on the subject land, e.g. unmapped locations used by these species is assessed for ecosystem credits.

Extensive bird surveys over multiple years and seasons were undertaken and the Regent Honeyeater was not recorded. Nevertheless, this species has been assessed as being present and all mapped important habitat to be impacted will be offset under the SODA specifically for this species. Any other areas of unmapped locations used by these species has been assessed for biodiversity offsets via ecosystem credits as required under the BAM.

The locations identified as potential habitat for Regent Honeyeater are mapped in *Figures 14.13a and 14.14 of Technical Report 1 – Biodiversity development assessment report*. The assessment identifies that the main area of impact to mapped important habitat for the Regent Honeyeater is within the Singleton Military Area land, within which efforts were taken to minimise impacts through co-location with existing transmission lines.

Several management and mitigation measures will be carried out to further avoid and minimise impacts on the Regent Honeyeater and its habitat including (refer to *Appendix D (Updated mitigation measures)* of the Amendment Report):

- mitigation measure B2 that requires further micro-siting during detailed design to continue to minimise impacts on Regent Honeyeater Habitat
- mitigation measure B9 that requires pre-clearing surveys and delineation of no-go zones
- mitigation measure B14 that requires monitoring of clearing of native vegetation to make sure the impacts are not greater than those calculated in the assessment.

A BMP and connectivity strategy will also be developed and implemented to guide the management and evaluation of mitigation measures. The BMP will also include a revegetation/rehabilitation plan, which will help minimise long-term impacts on habitat.

EnergyCo will enter into a SODA with NSW DCCEEW who would have the responsibility for delivering biodiversity offsets for the project. As per clause 6.3A(1) of the Biodiversity Conservation Regulation 2017, a SODA is required to be developed following project approval as it relies on the finalised offset credit calculation. It is noted that since *Technical Report 1 – Biodiversity development assessment report* prepared for the EIS, the offset credits required for the residual biodiversity impacts of the project have been revised (refer to the *Appendix E (Revised biodiversity development assessment report)* of the Amendment Report).

Once the agreement is entered into, the SODA will be published on the NSW DCCEEW Register of strategic offset delivery agreements and will specify the number and class of biodiversity credits that would, at the time of entering the SODA, otherwise have been required under the relevant planning approval for the project. Any species-specific conservation measures for the Regent Honeyeater will be outlined in the SODA.

The offsetting under the SODA would occur in accordance with the CIS that has been recently published on the NSW DCCEEW website. This strategy recognises the importance to secure regionally significant habitats for the Regent Honeyeater and Swift Parrot as a conservation priority (refer to section 2.3 of the Strategy).

Section 3.2 of the CIS also describes new partnership opportunities identified with Aboriginal landowners and communities that may be informed by further consultation with Aboriginal stakeholders. It notes that these opportunities could include participation in existing conservation programs as landowners, in implementing restoration and recovery actions, or as part of offsetting and states that the Biodiversity Conservation Trust (BCT's) Cultural Biodiversity Conservation offer for Aboriginal landowners will run over the next two years.

6.17.3 Aboriginal heritage

Impact assessment approach

Summary of issue

The submission raised concern that *Technical Report 2 – Aboriginal cultural heritage assessment* and EIS have not adequately considered flora and fauna, land and water, which Mindaribba LALC notes comprise a significant aspect of intangible Aboriginal cultural heritage values. The submission requests that *Technical Report 2 – Aboriginal cultural heritage assessment* addresses objects and places, but also stories, songlines, viewsapes, access to Country, as well as impacts to flora and fauna. Specifically, Mindaribba LALC requests clarity on how the following issues have been addressed in *Technical Report 2 – Aboriginal cultural heritage assessment* and the EIS:

- flora and fauna impacts raised by Mindaribba LALC during the preparation of *Technical Report 2 – Aboriginal cultural heritage assessment* and EIS
- impacts to cultural landscapes and viewlines, given it is not always clear in publicly available maps and reports.

The submission also queried whether a summary of survey effort and test excavations was made public.

Response

EnergyCo acknowledges the matters raised by Mindaribba LALC regarding the consideration of intangible Aboriginal cultural heritage values in the Aboriginal cultural heritage assessment and the EIS, including the interrelationship between Country, land, water, flora and fauna, and cultural landscapes.

Technical Report 2 – Aboriginal cultural heritage assessment includes extensive information on the existing Aboriginal heritage environment for the project impact area and its surrounds. *Section 5.2 of Technical Report 2 – Aboriginal cultural heritage assessment* details the geology and soil landscapes of the project impact area, which assisted in developing predictions of areas of archaeological potential. The landscape of the project impact area and its surrounds is characterised in *Technical Report 2 – Aboriginal cultural heritage assessment* by rolling coastal plains and rugged terrain. Much of the topography was formed through interactions with major river and catchment systems as well as fluctuating ocean levels. Historical agricultural, forestry and mining activities have resulted in significant land clearance starting from the early 1820s.

Section 5.3 of Technical Report 2 – Aboriginal cultural heritage assessment includes details of the hydrology of the project impact area and its surrounds, noting that access to water and the natural resources associated with it would have influenced how Aboriginal people occupied the land and used resources near watercourses. The project impact area interacts and/or is in close proximity to the two major watercourses for the region, the Hunter River and Wollombi Brook, as well as significant local watercourses, such as Loder Creek, Jigadee Creek, Cedar Creek, Congewai Creek, Lords Creek, Dora Creek, Deep Creek and Monkey Place Creek.

Section 5.4 of Technical Report 2 – Aboriginal cultural heritage assessment includes details of flora and fauna of the project impact area and its surrounds given their importance to Aboriginal people from a cultural perspective as well as sources of food, medicine and materials. A number of

observed flora species of value to Aboriginal communities were also identified as part of the cultural values mapping investigations.

Extensive efforts to explore cultural values were undertaken as part of Technical Report 2 – Aboriginal cultural heritage assessment (refer to Chapter 7 (Cultural values mapping) of Technical Report 2 – Aboriginal cultural heritage assessment). This included early consultation and co-design workshops with key Traditional Owners, as well as a project specific cultural values mapping study presented in Chapter 7 and Appendix D of *Technical Report 2 – Aboriginal cultural heritage assessment* of the EIS, with the latter including extensive engagement with 14 Elders and Traditional Owners specifically to discuss Dreaming and traditional and contemporary values within and near the project impact area.

Activities conducted to inform the cultural values mapping study included large workshops facilitated by Aboriginal organisations, including the Mindaribba LALC, as well as multiple on-Country activities to explore key places (e.g. Lizard Rock, Pokolbin State Forest) and view-lines (e.g. Flat Rock) with these participants.

Technical Report 2 – Aboriginal cultural heritage assessment of the EIS includes a range of cultural sites, many of which have no tangible remains, including Freeman’s Waterhole (HTP-S-CVM06), Watagan Creek (#45-3-6623), Dora Creek (HTP-S-CVP03), Pulbah Island (HTP-S-CVM02), HTP-C-AR01 (#37-6-4486), and HTP-C-AR02 (#37-6-4485). A number of larger cultural landscapes are also identified within the project impact area to reflect these broader values, including Dora Pinnacles, Dora Creek, Flat Rock and Trig Road. Further, *Technical Report 2 – Aboriginal cultural heritage assessment* of the EIS explored major viewlines between cultural features across the region.

Impacts to cultural landscapes, viewlines and viewsapes are discussed in *section 12.4 of Technical Report 2 – Aboriginal cultural heritage assessment*. Detailed visual impact assessments have shown that there would be no substantive obstruction of viewlines, with the project not being visible in several instances. However, ongoing discussions with Aboriginal participants have indicated that they perceive the project as impacting viewlines and viewsapes, and that it would inhibit their ability to relay cultural information to others. As such, it is considered that the project would result in indirect impact to these culturally important viewlines and viewsapes. Similarly, despite being within the working landscape of the State forest, Aboriginal participants consider that the project would impact the Trig Road, Dora Creek, Dora Pinnacles, and Flat Rock cultural landscapes.

With regard to impacts to flora and fauna, the removal of vegetation within the construction impact area would adversely affect any culturally modified trees, cultural landscapes, and cultural places that have flora and/or fauna values where present. Two sites identified through the cultural values mapping investigations (HTP-C-AR01 and HTP-C-AR02) are anticipated to be impacted as a result of vegetation removal. Both HTP-C-AR01 and HTP-C-AR02 are patches of natural flora resources used by Aboriginal people in the past but reflect species that would be expected to occur across the State forests and broader region. Their loss reflects the Aboriginal participants interest in traditional ecological knowledge, but neither site is rare. *Appendix E (Post approval requirements – updated guiding principles)* of the *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report includes recommendations for methods to be developed and agreed with the Awabakal Traditional Owners and Forestry Corporation of NSW on the recovery, relocation and/or future management of relevant ecological species within these sites.

EnergyCo met with Mindaribba LALC on 24 November 2025 to discuss concerns in relation to impacts to flora and fauna and the involvement of Mindaribba LALC in biodiversity surveys. Following this meeting, further information was provided to Mindaribba LALC on the involvement of Aboriginal individuals in ecological surveys to date as well as species anticipated to be impacted as a result of the project.

To minimise impacts to cultural values more broadly as a result of the project, a cultural values mitigation strategy will be developed in consultation with the Awabakal and Wonnarua Elders and key knowledge-holders who participated in the cultural values mapping study for the project (refer to mitigation measure AH07). This will be undertaken to explore mitigations for the perceived social and cultural impacts to important viewlines and viewsapes between major promontories in HTP Central, and localised cultural landscapes at Trig Road, Flat Rock, Dora Creek and the Dora pinnacles. The strategy will include, but not be limited to, implementation of Aboriginal-led cultural inductions throughout the project impact area, support for cultural monitoring of development activities, and support for an Aboriginal-led research program.

Given the sensitivity of many of the cultural materials and values identified within the project impact area, they are not presented on publicly available maps or reports or are shown at scale to prevent their locations from being made public.

With regard to survey effort and test excavation coverage, the field investigations are outlined in detail in *Chapter 9* and *Appendix F* of *Technical Report 2 – Aboriginal cultural heritage assessment* of the EIS. In addition, survey effort and test excavation coverage undertaken following the finalisation of *Technical Report 2 – Aboriginal cultural heritage assessment* of the EIS are included in *section 5.4* of the *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report.

Management and mitigation

Summary of issue

The submission raised series of concerns and recommendations regarding the management and mitigation of both tangible and intangible heritage values, these include:

- information on survey methodology commitments (including test pit coverage, seasonality, etc) for additional heritage surveys that will be carried out prior to ground disturbing activities
- information on proposed protocols, induction content, or paid cultural monitor positions across heritage-sensitive works
- that cultural landscape and view line analysis are integrated into final design of the project and that tower locations and heights are amended to protect culturally significant vistas and pathways
- that the Mindaribba LALC have co-authorship of the Aboriginal cultural heritage management plan
- that the Aboriginal cultural heritage management plan specifies no-go areas, set stop-work triggers, confirms monitoring coverage, salvage protocols, and artefact custody/keeping-place arrangements
- that the Aboriginal cultural heritage management plan specifies explicit no-go criteria for which redesign of the project corridor is undertaken to avoid areas of significant tangible or intangible Aboriginal heritage value.

Response

EnergyCo acknowledges the matters raised by Mindaribba LALC in relation to the proposed management and mitigation of Aboriginal cultural heritage values, including expectations regarding governance, consultation, monitoring, and the protection of both tangible and intangible cultural heritage.

For any future on-Country survey activities, these would be developed as part of the various mitigation measures proposed in *Chapter 9 of the Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report, including the ACHMP (AH04), test excavation commitments (AH05), cultural values management (AH07), management of vegetation near view-lines (AH08, AH09), and long-term site condition and management following construction (AH10). These documents would further outline any required activities and be developed in consultation with the RAPs.

With regard to proposed protocols, induction content and cultural monitor positions across heritage-sensitive works, the *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report includes two mitigation measures that would inform on-Country activities, including the ACHMP (AH04) and the site condition reports (AH10). The former would provide details and direction on the type of consultation and on-Country activities required for the project, including inductions and mitigation activities (e.g. surface collection of artefacts and ground disturbance monitoring). The ACHMP would outline in detail the number of personnel required for this activity, and an indication of the timing and extent of such works. The latter condition proposes to explore the condition of cultural materials following construction and develop processes for their management into the future. Here to, it is expected that these documents would be developed in consultation with registered Aboriginal parties, and for on-Country activities to be outlined in detail.

With regard to the integration of cultural landscape and viewline analysis into the final design for the project, mitigation measures included in the *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report (AH08, AH09) require further consideration of impacts to cultural viewlines by the project, including ongoing efforts to minimise vegetation clearance, to continue to refine project elements, and where these prove unachievable to develop suitable mitigation outcomes in discussion with the registered Aboriginal parties.

With regard to co-authorship of the ACHMP with Mindaribba LALC, AH04 proposes to undertake the ACHMP in consultation with registered Aboriginal parties, which would include Mindaribba LALC, although stronger consultation principles are now included in *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report.

With regard to thresholds for avoidance of Aboriginal objects, sites and places and project re-design, the *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report includes two mitigation measures that commit to avoidance of significant cultural materials (AH02) and/or ongoing attempts to minimise impact to all identified cultural materials (AH03). In the case of AH02, 20 of the most significant sites within the project impact area are committed for avoidance. The *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report also includes AH01, which requires further consideration of avoidance when a detailed design becomes available. Further details of avoidance and minimisation measures would be developed in consultation with the registered Aboriginal parties as part of the ACHMP outlined in AH04. Thresholds for avoidance and redesign would be developed as part of the ACHMP, with 'regional'

significance typically defined and forming the main requirement for a project to avoid or re-design around cultural materials. Given the scale of the on-Country investigations as part of *Technical Report 2 – Aboriginal cultural heritage assessment*, it is not expected that such sites would be encountered during the construction activities that are not already presented and considered.

6.17.4 Cumulative impacts

Cumulative Aboriginal heritage impacts

Summary of issue

The submission raised concerns that an assessment of cumulative impacts to Aboriginal heritage associated with the project have not been undertaken with respect to impacts to flora and fauna that comprise aspects on intangible Aboriginal cultural heritage. The submission requests that the outcomes of this assessment are integrated into the Aboriginal cultural heritage management plan and the social impact assessment mitigation measures.

Response

EnergyCo acknowledges the matters raised by Mindaribba LALC regarding the consideration of cumulative impacts to Aboriginal cultural heritage, including the relationship between cumulative impacts to flora and fauna and intangible cultural heritage values, and the integration of these considerations into relevant management and mitigation frameworks.

Section 12.5 of *Technical Report 2 – Aboriginal cultural heritage assessment* discusses the potential for regional impacts on Aboriginal cultural heritage as a result of the project. This includes the potential for cumulative impacts on cultural places and values as a result of the impacts of the project alongside impacts to cultural places and values throughout the wider region. As is outlined in *Technical Report 2 – Aboriginal cultural heritage assessment* of the EIS, with the exception of Flat Rock Lookout (HTP-C-CP01), none of the cultural places proposed for impact as part of the construction of the project would result in cumulative impact to cultural values in the region. This includes both HTP-C-AR01 and HTP-C-AR02, which are patches of flora resources used by Aboriginal people in the past, but reflect species that would be expected to occur across the State forests and broader region. Their loss reflects an impact to traditional ecological knowledge and connection to flora and fauna, but neither site is rare across the region.

The *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report includes an updated discussion on the potential for cumulative impacts to Aboriginal heritage in section 8.5. As is outlined in the *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report, impacts to a culturally modified tree (Campbells Springs Track (#37-6-0553) following the inclusion of this culturally modified tree in the updated archaeological assemblage for the amended project impact area, would contribute to cumulative impacts for the project. The loss of a single tree in HTP Central was predicted in *Technical Report 2 – Aboriginal cultural heritage assessment* of the EIS to result in an 11 per cent loss of this site type documented in the Aboriginal Heritage Information Management System (AHIMS) system for the region. Adding a further site of this type therefore would result in a greater contribution to the loss of this site type in this region. It must, however, be highlighted that this site has the potential to be under-recorded in the region, with several other culturally modified trees identified as part of the field investigations undertaken

for this project, which represents a small portion of the extensive State forests and national parks in this region.

Cumulative impacts to Aboriginal heritage, including to flora and fauna values across the region, will be managed through the development of an Aboriginal cultural heritage management plan (ACHMP) (refer to mitigation measure AH04). As is outlined in *Appendix E (Post approval requirements – updated guiding principles)* of *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report, this will include the recovery and relocation of culturally significant flora within HTP-C-AR01 and HTP-C-AR02, and cultural monitoring for any areas identified as having significant cultural value. The ACHMP will also include procedures for the curation and long-term management of cultural materials recovered or relocated as part of the project. This will prioritise attempts to keep cultural materials on Country from which they were recovered, including any ongoing monitoring requirements to ensure the preservation of recovered cultural materials, such as culturally modified trees.

6.18 Mulgoa Valley Landcare Group

The Mulgoa Valley Landcare Group provided a submission in response to the public exhibition of the EIS on an unspecified date. The submission raised concerns of the impact to the Littlejohn's Tree Frog. This section provides a summary of the issues raised and consideration of those issues.

6.18.1 Biodiversity

Management and mitigation

Summary of issue

The Mulgoa Valley Landcare group raised general concerns with respect to the impacts on the Littlejohn's Tree Frog, noting that impact avoidance and mitigation measures are not proportionate to the impacts assessed for the species. The submission requested that sufficient funding is vested into appropriate mitigation measures such that impacts to this species are fully mitigated.

Response

EnergyCo acknowledges the matters raised by the Mulgoa Valley Landcare Group regarding the potential impacts of the project on Littlejohn's Tree Frog, including concerns about the proportionality and adequacy of proposed avoidance, mitigation and management measures.

Potential alternative sites for the southern switching station were assessed, as detailed in *section 3.6.1, Chapter 3 (Alternatives and options)* of the EIS. The preferred site for the southern switching station was assessed as Option 1 – Olney State Forest. This site was preferred as it was located on an old commercial timber plantation and had significant community benefits as it would not require the project to be constructed through the communities of Martinsville and Cooranbong.

As noted in *section 3.6.2* of the EIS, high-risk artificial breeding ponds for the Littlejohn's Tree Frog were identified and avoided compared to the preliminary HTP corridor through alternative routes in the Olney State Forest, adjacent to the Jilliby State Conservation Area. Despite this, *Technical*

Report 1 – Biodiversity assessment report acknowledges that the project would result in potential direct and indirect impacts on Littlejohn’s Tree Frog where impacts were unable to be avoided.

Following public exhibition of the EIS and in response to consultation carried out with species experts and regulators, amendments and refinements to the project have been made to further minimise impacts to Littlejohn’s Tree Frog within the Olney State Forest. These changes include redesign of tower and related infrastructure locations, which are reflected in the amended disturbance areas and no-go zones mapped in *Appendix E (Revised biodiversity assessment report)* prepared for the Amendment Report. Importantly, the amended project has avoided 60 of 62 (or 96 per cent) of the recently constructed breeding ponds for Littlejohn’s Tree Frog. *Section 9.1.3.5 of Appendix E (Revised biodiversity development assessment report)* of the Amendment Report contains expanded and detailed information on the likely impacts to Littlejohn’s Tree Frog as well as the actions taken to avoid and minimise direct and indirect impacts to this species. Additional specific commitments to continue to avoid or minimise impacts to threatened frog species, particularly Littlejohn’s Tree Frog, have been included in the updated mitigation measures (refer to *Appendix D (Updated mitigation measures)* of the Amendment Report). This includes consideration of micro-siting to continue to avoid impact to amphibian breeding habitats during detailed design, potential inclusion of supplementary breeding ponds or connectivity measures in the design as well as specific erosion and sediment control measures that would be implemented to minimise indirect impacts.

Where impacts remain despite these efforts, offsets will be required via the SODA to be delivered by CPHR group in NSW DCCEE. This will include investment in conservation outcomes for this species that would be proportionate to the residual impacts on the species. It is anticipated that the SODA will be delivered in line with the CIS.

6.19 National Parks Association of NSW

The National Parks Association of NSW provided a submission in response to the public exhibition of the EIS (29 September 2025). The submission raised concerns with respect to the route selection for the project and associated impacts to biodiversity and cultural heritage. The submission also raised concerns over biodiversity offset costs and the delivery of biodiversity offsets. This section provides a summary of the issues raised and consideration of those issues.

6.19.1 Alternatives and options

Selection of the preferred route option

Summary of issue

The submission raised concerns regarding the criteria used in the evaluation of possible project corridors. Specifically, National Parks Association contended that corridor selection criteria have not appropriately considered nature positive principles as detailed in the NSW Plan for Nature (DCCEE 2024). National Parks Association expressed concern that the proposed HTP corridor has sought to minimise negative impacts to threatened species and biodiversity values, as opposed to avoiding these impacts outright. The submission noted that EnergyCo has not appropriately applied

the avoid, minimise, offset hierarchy in the selection of the HTP corridor. Further, that the proposed project corridor bisects continuous natural areas of substantial indigenous cultural heritage significance.

The submission raised additional concerns on how the consideration of alternative options have been presented and justified in the EIS particularly with respect to the avoidance of impacts to biodiversity and ecosystem values. The submission noted the difficulty in making a comparison between potential options for the project corridor presented in the EIS given the lack of detail presented on certain key matters. For instance, the submission noted the EIS presents little discussion or sufficient justification on why options for utilising or upgrading existing transmission corridors have been excluded. The submission also requested detail on why a cost-benefit analysis been not undertaken for proposed HTP corridor options which quantify positive and negative impacts to the wider community. The submission noted that the EIS does not explain how biodiversity offset liabilities were considered in assessing route feasibility and raised concern that the cost of offset liabilities will be passed onto consumers. The submission recommended that a cost-benefit analysis is undertaken such that positive and negative impacts of all possible HTP corridor options are documented such that a comparison between options can be made.

Response

EnergyCo acknowledges the matters raised by the National Parks Association regarding the application of corridor selection criteria, including consideration of nature positive principles, the avoid–minimise–offset hierarchy, the assessment and justification of alternative corridor options, and the treatment of biodiversity impacts and offset implications in the evaluation of the preferred HTP route.

Approach to selecting the preferred route

A detailed description of the alternatives considered for the project and the justification for the preferred transmission line alignment was provided in *Chapter 3 (Alternatives and options)* of the EIS. The alternatives analysis followed a holistic, multi-criteria assessment that considered impacts to people and the environment, technical feasibility and cost.

Corridor alternatives were identified based on EnergyCo's planning pillars and project objectives developed specifically for the HTP. EnergyCo's key planning pillars guide the corridor selection process for its projects in NSW. These pillars and principles align with the requirements of the *NSW Electricity Infrastructure Investment Act 2020* and were presented in *Table 3.3* of the EIS. The 'environment' planning pillar is defined as 'impacts to natural and cultural environments' and its corresponding planning principle (among others) is to 'minimise negative impacts on biodiversity values' and 'minimise negative impacts on cultural heritage values'.

EnergyCo's project objectives (among others) were to 'minimise significant land use conflicts and impacts on people and environment' (refer to *section 3.3* of the EIS).

Three strategic corridors were selected (North, Central, South) with 19 route options identified and assessed, as outlined in *section 3.3* of the EIS. Route option South A was selected as the preferred route for the HTP.

The advantages and disadvantages of Route option South A were outlined in *Table 3.5* of the EIS. It was concluded that there would be fewer impacts to people as it crosses less private land and is situated further away from residential dwellings and suburbs. It was also identified that there was greater capacity for colocation with existing transmission lines and the utilisation of large amounts of public land and potentially available mining land. EnergyCo acknowledged that a disadvantage of route option South A would be the introduction of new electricity transmission infrastructure through vegetated areas of State forests that would result in impacts on biodiversity, although less than route options North A and Central A which would impact Hunter Valley TECs.

Three transmission alignment alternatives (Alignment A, B and C) within route option South A were then assessed using the project objectives and additional environmental considerations that included criteria to 'minimise impacts on unique or sensitive biodiversity and cultural values and offset unavoidable biodiversity impacts' (refer to *Table 3.6* of the EIS). Alignment A was identified as the preferred alignment for the HTP.

In response to early community feedback and further technical and environmental investigations, several adaptations and improvements were made to the preferred alignment for the HTP. This included moving the southern switching station from Eraring Power Station to the site of an old commercial timber plantation in Olney State Forest. Moving the switching station made it possible to avoid the communities of Martinsville and Cooranbong, removing 32 private landowners from the HTP corridor. The revised corridor also avoided major recreation areas in the State forests and no longer traversed Jilliby State Conservation Area.

EnergyCo acknowledges that in some locations competing environmental, social and technical constraints occur. In these instances, EnergyCo has adopted a balanced and transparent approach to determine the most appropriate alignment, ensuring that decisions are informed by data, and in consultation with affected stakeholders.

Avoidance of high conservation areas and other biodiversity and cultural heritage values

Avoidance and minimisation of biodiversity and cultural heritage impacts was a key consideration in the alternatives and options analysis. High conservation value areas such as Watagans National Park, Werakata National Park, Warrawolong Flora Reserve and existing biodiversity offset areas associated with the Bulga mining complex were avoided, as discussed in *section 3.3* and *section 8.2, Chapter 8 (Biodiversity)* of the EIS. In addition, the better-quality remnants of TECs were avoided that provide habitat for threatened species and important habitat for the Regent Honeyeater and Swift Parrot.

Known world heritage properties, national heritage places, Commonwealth heritage places, and land subject to Native Title were avoided such as the Sugarloaf ridgeline, an area of Aboriginal cultural heritage significance, as discussed in *section 3.3* and *section 3.5* of the EIS.

Following the selection of a preferred alignment, an iterative design process based on field survey results was undertaken to further avoid and minimise the project's impacts on biodiversity and cultural heritage, as outlined in *section 3.6, Chapter 8 (Biodiversity)* and *Chapter 9 (Aboriginal heritage)* of the EIS.

With regards to biodiversity, the following additional considerations were incorporated into the transmission line alignment and project assessment:

- co-location – placing sections of the transmission line alongside existing infrastructure or in disturbed areas, such as mining sites, forestry operations or cleared lands, where native vegetation and habitat quality are low
- relocation – adjusting the alignment to avoid impacts on threatened species and communities and known populations of serious and irreversible impact species, including the Brush-tailed Rock Wallaby, microbats and threatened flora habitats
- partial clearing – implementing controlled vegetation clearing within and adjacent to the transmission line easement, focusing only on vegetation taller than two metres
- spanning and retention of forested gullies – reducing the extent of clearing within the State forests by spanning steep ravines and valleys where adequate conductor clearance can be achieved
- access – using existing access tracks where possible to minimise additional vegetation clearing and minimising construction of new access tracks
- micro-siting – mechanisms to adjust project features during detailed design to avoid areas with high biodiversity value when on the ground works commence, including the minor relocation of project elements such as transmission towers to avoid high biodiversity values.

With regards to Aboriginal cultural heritage, adjustments to the transmission line alignment were made to avoid/minimise impacts to culturally significant sites and locations, both tangible and intangible.

In the State forests, the transmission line alignment was adjusted to relocate transmission towers off prominent ridgelines and hilltops, moving them onto upper slopes to reduce visual prominence from culturally significant lookouts, particularly Lizard Rock and the areas between Mount Sugarloaf and Mount Yengo.

Further refinements were made in Pokolbin and Corrabare State forests to increase distances from key rock shelters and avoid stone arrangements. In Watagan State Forest, the transmission line was diverted north to avoid intersecting an Aboriginal land claim. This shift also established a 300-metre buffer from significant archaeological rock shelters, simultaneously reducing visual impacts from the Flat Rock Lookout. In Olney State Forest, the route was adjusted to minimise indirect impacts on the Abbots Fall cultural landscape and its associated grinding groove site.

Use of existing transmission line infrastructure

Strategic alternatives in the form of network solutions (optimisation and modification of existing transmission line infrastructure) were explored in *section 3.1* of the EIS. Network solutions involve upgrading existing transmission line infrastructure in the region. These upgrades would not fully unlock the supply of electricity from the Central-West Orana or New England REZs. These upgrades would increase the transfer level by about 200 megawatts (MW) to one gigawatt (GW), but not the three to four GW required to meet the energy demands of the Hunter, Sydney and Illawarra regions. Furthermore, the existing 330 kV transmission infrastructure is an essential part of the existing electricity grid in NSW. Upgrading it would require many outages over a two year period and there is currently no back-up transmission so this would risk energy security (a reliable supply of electricity) for consumers in NSW.

Optimisation and modification of the existing 330 kV transmission infrastructure in the region would also cause significant land use conflicts in the Pokolbin wine/tourist area and surrounding residential areas. It would result in extensive clearing of TECs in areas such as the Singleton Military Area, Werakata State Conservation Area and Werakata National Park.

New transmission line infrastructure (in the form of a 500 kV double circuit transmission line) is therefore required for the HTP.

The transmission line alignment has been refined to utilise existing transmission line infrastructure where feasible, reducing potential social and environmental impacts, as discussed in *section 3.6.2* of the EIS and shown in *Figure 4.2 in Chapter 4 (Project description)* of the EIS. The preferred transmission line alignment co-locates with existing transmission line infrastructure in the vicinity of Hunter Valley Operations, the Bulga mining complex, and in the Singleton Military Area.

Cost-benefit analysis

A cost-benefit analysis was not carried out for the project, however a preferred route options evaluation was carried out to identify the preferred route option for the project. The key considerations as part of the preferred route options evaluation, including areas of opportunity and priorities to avoid, are detailed in *Table 3.4* of the EIS, and the advantages and disadvantages of the different route options, in line with these areas of opportunity and priorities to avoid, are outlined in *Table 3.5* of the EIS. This process identified route option (South A) as the preferred route option.

Consideration of cost and biodiversity offsets

Cost was a consideration in the alternatives and options assessment of the HTP, as discussed in *section 5.19.2, Chapter 5 (Response to community submissions)* of this Submissions Report.

Avoidance and minimisation of biodiversity impacts (which correlates to a reduced biodiversity offset liability) was a key consideration in the alternatives and options analysis (refer to *section 4.1.2* of this Submissions Report). Desktop assessment and limited survey were carried out to further understand the potential biodiversity offset liabilities of each route option, and these were included in a comparative analysis alongside other considerations to determine the preferred route option. Notwithstanding, there would be unavoidable impacts to biodiversity as a result of the construction of the project and these impacts are required to be offset financially per the NSW *Biodiversity Conservation Act 2016* (BC Act). The estimated biodiversity credit liability requirements for the HTP have been calculated using the *Biodiversity Assessment Method Calculator* (BAM-C). The total credit liability for the amended project is provided in *section 11 of Appendix E (Revised biodiversity development assessment report)* of the Amendment Report.

EnergyCo will enter into a SODA with the Secretary of the NSW Department of Climate Change, Energy, Environment and Water (NSW DCCEEW) for the HTP. Under this agreement, responsibility for delivering biodiversity offsets will be transferred to NSW DCCEEW with commensurate funding from EnergyCo.

Further reduction of biodiversity impacts following exhibition of the EIS

In response to submissions received on the EIS as well as ongoing consultation with government agencies and stakeholders, further refinements to the transmission line alignment have been made to further minimise impacts to biodiversity as a result of construction of the project. Key amendments made to the project to further minimise biodiversity impacts include:

- realignment of the transmission line at Gouldsville to further minimise impacts to threatened ecological communities (refer to *section 3.2.1* of the Amendment Report)
- changes to access tracks to minimise biodiversity impacts within Olney State Forest (refer to *section 3.2.3* of the Amendment Report)
- changes to access tracks at Bulga to minimise impacts to mining operations, which includes the avoidance of biodiversity offset areas (refer to *section 3.2.3* of the Amendment Report)
- changes to access tracks near Bayswater to avoid an existing biodiversity offset area (refer to *section 3.2.3* of the Amendment Report)
- removal of a stringing site in Olney State Forest for biodiversity avoidance (refer to *section 3.2.4* of the Amendment Report).

Biodiversity impacts as a result of the amended project, incorporating each of these changes as well as other amendments and refinements to the project, are outlined in *section 5.2* of the Amendment Report and *Appendix E (Revised biodiversity development assessment report)* of the Amendment Report.

6.19.2 Biodiversity

Biodiversity offsets

Summary of issue

The submission raised several concerns with respect to the assessment of biodiversity impacts and the associated calculation of biodiversity offset liabilities, and the potential impacts of passing offset liabilities onto consumers. The National Parks association of NSW noted that the Biodiversity Assessment Method (BAM) has not adequately considered impacts including habitat fragmentation, movement barriers, impacts on non-threatened species, and disturbance effects, such as fire, pests and weeds. Furthermore, National Parks Association noted that the consideration of these impacts in *Technical Report 1 – Biodiversity development assessment report* of the EIS would substantially increase biodiversity offset liabilities.

Furthermore, National Parks Association expressed concern that offset liabilities have the potential to affect the financial feasibility of the project. The National Park's Association of NSW noted that high offset liabilities are the natural consequence of diverting the HTP corridor into State forest to avoid impacts to private landowners. The submission expressed concerns that the financial cost of biodiversity offsets will be passed onto electricity consumers.

The submission also noted concern with respect to the delivery of offsets via the SODA. While acknowledging and commending the benefits of the SODA in delivering offset strategy in accordance with a regional plan, National Parks Association expressed concern that the SODA was not available for public inspection during the EIS exhibition phase. Furthermore, that the lack of public exhibition removes much certainty with respect to the operation of the SODA, including

arrangements for auditing, participation of local and regional conservation groups and activities, and the public scrutiny of particular offsetting arrangements.

The submission also expressed concern over the feasibility over the retirement of offset liabilities within the 3-year period prescribed by the Biodiversity Regulation 2017. In particular, National Parks Association notes that retiring credits for private land biodiversity stewardship agreements within a reasonable time span will be challenging given the scale of the HTP. The National Parks Association of NSW recommended the acquisition of property as an alternative and that actions should focus on advancing the integrity and resilience of existing reserves compared to a focus on scattered stewardship sites.

Response

EnergyCo acknowledges the National Parks Association of NSW's concerns regarding biodiversity offset liabilities and the potential implications for project feasibility and consumer costs.

Avoidance and minimisation of biodiversity impacts (which correlates to a reduced biodiversity offset liability) was a key consideration in the alternatives and options analysis as discussed in section 5.9.1 of this Submissions Report. The calculated biodiversity impacts for the project have been based off conservative assumptions and are likely to be substantially less than calculated. EnergyCo remains committed to applying the avoid–minimise–offset hierarchy during detailed design and construction to reduce environmental impacts and ensure biodiversity outcomes are achieved in an ecologically and economically responsible manner.

The biodiversity offset strategy for the HTP will be developed in accordance with NSW Government policy and the Biodiversity Offset Scheme under the *Biodiversity Conservation Act 2016*. Offset requirements are determined through the Biodiversity Assessment Method (BAM) and form part of the project's overall environmental management framework. These requirements will be transparently reported as part of the post-approval phase once detailed design and site-specific assessments are complete.

EnergyCo will enter into a SODA, which means that NSW DCCEEW would have the responsibility for delivering the biodiversity offsets for the project. The biodiversity offset delivery would be carried out in accordance with the CIS that has been prepared and published by NSW DCCEEW since exhibition of the EIS. This strategy will underpin the implementation of the SODA for the project and guide the priority areas and actions for investment that are identified for the Hunter region. The CIS has been developed to:

- integrate conservation programs and priorities to optimise delivery of regional conservation outcomes
- protect regionally significant conservation values
- improve ecological connectivity and resilience to climate change
- restore degraded ecosystems and habitats
- contribute to a comprehensive, adequate and representative protected area system
- deliver social benefits for the region.

The CIS considers opportunities to enhance biodiversity outcomes by rebuilding connectivity and resilience and consolidating protected areas, including consideration of land within and surrounding national parks and State forests.

The implementation of the SODA by NSW DCCEEW will ensure that the biodiversity offsets and measures taken will compensate for the unavoidable residual impacts to the required level which will result in overall regional conservation outcomes for affected species and ecosystems.

Under clause 9.8A of the Biodiversity Conservation Regulation 2017, information on the progress of offset delivery and expenditure must be published on the public register for each 3-month period. To achieve this, an offset delivery progress report will be prepared and published on the NSW DCCEEW website once the SODA has been finalised, similar to the report that has been published for the Central West Orana Transmission Project SODA. This report will provide commentary on the timeframes that have and are intended to be achieved to meet the required offset obligation for the project.

6.20 Nature Conservation Council

The Nature Conservation Council provided a submission in response to the public exhibition of the EIS (24 September 2025). The submission noted the importance of the delivery of the project to meet emissions reduction targets but raised concerns with respect to the application of nature positive goals in the corridor selection process. This section provides a summary of the issues raised and consideration of those issues.

6.20.1 Strategic context

Project development

Summary of the issues

Nature Conservation Council made recommendation with respect to the application of nature positive principles in development of the HTP. Specifically, Nature Conservation Council referred to the NSW Plan for Nature which includes commitments to halting and reversing biodiversity loss, setting targets for landscape conservation and restoration, and requiring genuine avoidance of impacts before biodiversity offsets are considered. The Nature Conservation Council expressed concern that these principles have not been appropriately considered in development of the HTP. Specifically, the Nature Conservation requested the following with respect to the application of nature positive principles and the achievement of other positive strategic outcomes of the HTP:

- that greater targets, ambition and clarity are needed to protect and restore biodiversity at a regional level including specific conservation strategies and restoration targets, clear funding commitments, and the opportunity for public consultation and input to the development and review of the strategies
- the identification of ecological protection and restoration priorities to contribute to specific nature positive environmental regional outcomes
- the development of a regional community benefit plans and strengthen developer consultation with communities.

Response

Avoidance and minimisation of biodiversity impacts was a key consideration in the alternatives and options analysis and in the refinement of the project. This was detailed in *Chapter 3 (Alternatives and options)*, *Technical Report 1 – Biodiversity development assessment report* of the EIS and *Appendix E (Revised biodiversity development assessment report)* of the Amendment Report.

As with other major projects, unavoidable impacts to biodiversity are required to be offset financially per the *NSW Biodiversity Conservation Act 2016* (BC Act). The estimated biodiversity credit liability requirements for the HTP have been calculated using the *Biodiversity Assessment Method Calculator* (BAM-C). The total credit liability for the amended project is provided in *section 11 of Appendix E (Revised biodiversity development assessment report)* of the Amendment Report. EnergyCo intends to enter into a SODA with the Secretary of the NSW DCCEEW for the HTP. Under this agreement, responsibility for delivering biodiversity offsets will be transferred to NSW DCCEEW with commensurate funding from EnergyCo.

The biodiversity offset delivery would be carried out in accordance with the CIS that has been prepared and published by NSW DCCEEW since exhibition of the EIS. This strategy will underpin the implementation of the SODA for the project and guide the priority areas and actions for investment that are identified for the Hunter region.

Biodiversity offsets secured under the SODA would constitute either the retirement of like-for-like credits or conservation actions that are targeted at impacted entities. NSW DCCEEW will engage with credit owners, landowners and other potential partners in offset delivery through a range of programs including Credit Supply Fund auction processes, sponsored biodiversity stewardship agreements under the Stewardship Support Program, acquisition of new public land to create credits and tailored Saving our Species projects, as detailed in *section 8.6, Chapter 8 (Biodiversity)* of the EIS.

With regard to community benefits, EnergyCo is expecting to commence consultation with relevant communities in 2026 to inform the design and delivery of the community and employment benefit program in the Hunter-Central Coast region that will ensure benefits are shared with the local communities hosting the renewable energy transition, including those hosting the HTP.

6.20.2 Alternatives and options

Selection of the preferred route option

Summary of the issues

The submission expressed concern that the selection of the HTP corridor has not appropriately balanced social, economic and environmental impacts. Specifically, Nature Conservation Council expressed concern that the HTP corridor has been diverted off private and cleared land and into areas of State forest comprising areas of critically endangered ecological communities and critical habitat for the Littlejohn's Tree Frog. The submission recommended that a cost-benefit analysis be undertaken to enable proper comparisons of the various HTP corridor options with a stronger consideration of alternative routes that would substantially avoid the losses to biodiversity and cultural heritage of the proposed HTP corridor.

Response

Approach to selecting the preferred route

A detailed description of the alternatives considered for the project and the justification for the preferred transmission line alignment was provided in *Chapter 3 (Alternatives and options)* of the EIS. The alternatives analysis followed a holistic, multi-criteria assessment that considered impacts to people and the environment, technical feasibility and cost.

Corridor alternatives were identified based on EnergyCo's planning pillars and project objectives developed specifically for the HTP. EnergyCo's key planning pillars guide the corridor selection process for its projects in NSW. These pillars and principles align with the requirements of the NSW *Electricity Infrastructure Investment Act 2020* and were presented in *Table 3.3* of the EIS. The 'environment' planning pillar is defined as 'impacts to natural and cultural environments' and its corresponding planning principle (among others) is to 'minimise negative impacts on biodiversity values' and 'minimise negative impacts on cultural heritage values'.

EnergyCo's project objectives were to 'minimise significant land use conflicts and impacts on people and environment' (refer to *section 3.3* of the EIS).

Three strategic corridors were selected (North, Central, South) with 19 route options identified and assessed, as outlined in *section 3.3* of the EIS. Route option South A was selected as the preferred route for the HTP.

The advantages and disadvantages of Route option South A were outlined in *Table 3.5* of the EIS. It was concluded that there would be fewer impacts to people as it crosses less private land and is situated further away from residential dwellings and suburbs. It was also identified that there was greater capacity for colocation with existing transmission lines and the utilisation of large amounts of public land and potentially available mining land. EnergyCo acknowledged that a disadvantage of route option South A would be the introduction of new electricity transmission infrastructure through vegetated areas of State forests that would result in impacts on biodiversity, although less than route options North A and Central A which would impact Hunter Valley Threatened Ecological Communities (TECs).

Three transmission alignment alternatives (Alignment A, B and C) within route option South A were then assessed using the project objectives and additional environmental considerations that included criteria to 'minimise impacts on unique or sensitive biodiversity and cultural values and offset unavoidable biodiversity impacts' (refer to *Table 3.6* of the EIS). Alignment A was identified as the preferred alignment for the HTP.

Cost was a consideration in the alternatives and options assessment of the project, however, a cost-benefit analysis was not undertaken for the HTP, as discussed in *section 4.19.2* of this Submissions Report.

EnergyCo acknowledges that in some locations competing environmental, social and technical constraints occur. In these instances, EnergyCo has adopted a balanced and transparent approach to determine the most appropriate alignment, ensuring that decisions are informed by data, and in consultation with affected stakeholders.

Avoidance of high conservation areas and other biodiversity and cultural heritage values

Avoidance and minimisation of biodiversity and cultural heritage impacts was a key consideration in the alternatives and options analysis. High conservation value areas such as Watagans National Park, Werakata National Park, Warrawolong Flora Reserve and existing biodiversity offset areas associated with the Bulga mining complex were avoided, as discussed in *section 3.3* and *section 8.2* of the EIS. In addition, the better-quality remnants of the Central Hunter Valley Eucalypt Forest and Woodland and Warkworth Sands Woodland of the Hunter Valley TECs were avoided that provide habitat for threatened species and important habitat for the Regent Honeyeater and Swift Parrot.

Known world heritage properties, national heritage places, Commonwealth heritage places, and land subject to Native Title were avoided such as the Sugarloaf ridgeline, an area of Aboriginal cultural heritage significance, as discussed in *section 3.3* and *section 3.5* of the EIS

Following the selection of a preferred alignment, an iterative design process based on field survey results was undertaken to further avoid and minimise the project's impacts on biodiversity and cultural heritage, as outlined in *section 3.6* and *Chapter 8 (Biodiversity)* and *Chapter 9 (Aboriginal heritage)* of the EIS.

With regards to biodiversity, the following additional considerations were incorporated into the transmission line alignment and project assessment:

- co-location – placing sections of the transmission line alongside existing infrastructure or in disturbed areas, such as mining sites, forestry operations or cleared lands, where native vegetation and habitat quality are low
- relocation – adjusting the alignment to avoid impacts on threatened species and communities and known populations of serious and irreversible impact species, including the Brush-tailed Rock Wallaby, microbats and threatened flora habitats
- partial clearing – implementing controlled vegetation clearing within and adjacent to the transmission line easement, focusing only on vegetation taller than two metres
- spanning and retention of forested gullies – reducing the extent of clearing within the State forests by spanning steep ravines and valleys where adequate conductor clearance can be achieved
- access – using existing access tracks where possible to minimise additional vegetation clearing and minimising construction of new access tracks
- micro-siting – mechanisms to adjust project features during detailed design to avoid areas with high biodiversity value when on the ground works commence, including the minor relocation of project elements such as transmission towers to avoid high biodiversity values.

With regards to Aboriginal cultural heritage, adjustments to the transmission line alignment were made to avoid/minimise impacts to culturally significant sites and locations, both tangible and intangible.

In the State forests, the transmission line alignment was adjusted to relocate transmission towers off prominent ridgelines and hilltops, moving them onto upper slopes to reduce visual prominence from culturally significant lookouts, particularly Lizard Rock and the areas between Mount Sugarloaf and Mount Yengo.

Further refinements were made in Pokolbin and Corrabare State forests to increase distances from key rock shelters and avoid stone arrangements. In Watagan State Forest, the transmission line was diverted north to avoid intersecting an Aboriginal land claim. This shift also established a 300-metre buffer from significant archaeological rock shelters, simultaneously reducing visual impacts from the Flat Rock Lookout. In Olney State Forest, the route was adjusted to minimise indirect impacts on the Abbots Fall cultural landscape and its associated grinding groove site.

Alternatives to minimise impacts to Littlejohn's Tree Frog

As discussed in sections 5.1.2 and 6.24.2 of this Submissions Report, following public exhibition of the EIS and in response to consultation carried out with species experts and regulators, amendments and refinements to the project have been made to further minimise impacts to Littlejohn's Tree Frog within the Olney State Forest including adjustments north of the proposed Olney switching station to access tracks, transmission line tower locations, removal of a stringing site and defining additional areas where no clearing of vegetation would be permitted. These changes are reflected in the disturbance areas and no-go zones mapped in *Appendix E (Revised biodiversity development assessment report)* of the Amendment Report). Importantly, the project has avoided 60 of 62 (or 96 per cent) of the recently constructed breeding ponds for Littlejohn's Tree Frog.

Additional specific commitments to continue to avoid or minimise impacts to threatened frog species have been included in the updated mitigation measures (refer to *Appendix D (Updated mitigation measures)* of the Amendment Report). This includes consideration of micro-siting to continue to avoid impact to amphibian breeding habitats during detailed design, potential inclusion of supplementary breeding ponds or connectivity measures in the design as well as erosion and sediment control measures.

6.20.3 Engagement

Future community and stakeholder engagement

Summary of the issues

The Nature Conservation Council emphasised the importance of ongoing genuine engagement and consultation with First Nations communities to project planning, construction, operations and decommissioning.

Response

EnergyCo acknowledges the matters raised by the Nature Conservation Council regarding the importance of ongoing, meaningful engagement with First Nations communities throughout project planning, construction, operation and decommissioning.

Consultation activities with First Nations communities completed as part of *Technical Report 2 – Aboriginal cultural heritage assessment* were undertaken in accordance with Heritage NSW guidelines. The project also undertook additional project-specific communication strategies to promote transparent and frequent two-way dialogue. Activities included early briefings and exploration of co-design opportunities, Aboriginal focus group meetings (face-to-face) throughout the assessment process, a cultural values mapping study with Elders and key knowledge-holders,

and on-site field investigations. Since November 2023 and throughout the development of the project and progression of *Technical Report 2 – Aboriginal cultural heritage assessment*, EnergyCo liaised with 48 RAP organisations and/or individuals. The RAPs include locally based Wonnarua, Awabakal and Darkinjung individuals and/or organisations based primarily in Singleton, Cessnock and Newcastle, as well as the broader Aboriginal community with an interest in cultural heritage management. Discussions with the RAPs have been extensive and wide-ranging over the 22-month assessment process for *Technical Report 2 – Aboriginal cultural heritage assessment*. Feedback on the project and *Technical Report 2 – Aboriginal cultural heritage assessment* activities has generally focussed on who speaks for Country, the potential impact to Dreaming places and stories within the region, targeted discussion around key sites including rockshelters, art sites and grinding grooves identified as part of the field investigation, and mitigation measures. Prior to exhibition of the EIS, the draft *Technical Report 2 – Aboriginal cultural heritage assessment* was provided to RAPs for review and comment between 12 February 2025 and 19 March 2025, and again between 4 July 2025 and 1 August 2025 for review of proposed mitigation measures following refinements prior to finalisation of the report.

A summary of consultation activities with Aboriginal individuals and organisations as part of the development of *Technical Report 2 – Aboriginal cultural heritage assessment* is included in section 9.1.4, Chapter 9 (*Aboriginal heritage*) of the EIS and Chapter 4 (*Aboriginal consultation*) of the *Technical Report 2 – Aboriginal cultural heritage assessment*.

Since the finalisation of *Technical Report 2 – Aboriginal cultural heritage assessment* and the exhibition of the EIS, consultation has remained ongoing with around 100 further interactions having occurred between July and December 2025. The draft *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report was provided to RAPs for review and comment between 21 November 2025 and 19 December 2025. When incorporating the interactions undertaken as part of the *Technical Report 2 – Aboriginal cultural heritage assessment* this amounts to over 1500 interactions with Aboriginal individuals and/or organisations on the project since November 2023, and around 655 person days of on-site participation.

A summary of consultation activities with Aboriginal individuals and organisations as part of the development of the *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report is included in Chapter 4 (*Aboriginal consultation*) of the *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report.

EnergyCo is committed to ongoing genuine engagement with First Nations communities, as is outlined in mitigation measure AH12 of the *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report. First Nations communities will also continue to be involved in the project through other initiatives such as further impact avoidance and minimisation activities during detailed design and construction (mitigation measure AH03), and through development of a cultural values mitigation strategy (mitigation measure AH07) and a heritage interpretation strategy (mitigation measure AH11).

6.20.4 Biodiversity

Biodiversity offsets

Summary of the issues

The Nature Conservation Council raised concern that biodiversity offsets would not fully compensate for impacts to biodiversity associated with the HTP. Specifically, Nature Conservation Council noted that the EIS does not go beyond assessment impacts to biodiversity for the purpose of calculating offset liabilities for threatened species. The Nature Conservation Council noted, furthermore, the wider indirect biodiversity impacts including habitat fragmentation, movement barriers (such as vehicle tracks), impacts on non-threatened species, and disturbance effects, such as fire, pests and weeds are not appropriately considered in offset liabilities.

The submission raised the additional concern that the retirement of offset liabilities via the SODA delivery period and biodiversity stewardship agreements within a timely manner would be challenging. Biodiversity Conservation Council recommended, accordingly, that EnergyCo focus on reserve acquisitions to allow for greater habitat connectivity and resilience, compared with stewardship agreements that are likely to include geographically separate sites. The submission put forward several specific sites for consideration.

Response

Chapter 3 (Alternatives and options) of the EIS, Chapter 7 of Technical Report 1 – Biodiversity development assessment report and Appendix E (Revised biodiversity development assessment report) of the Amendment Report provides further detail on how biodiversity values were avoided and minimised through the planning and design phase of the project, including in the project corridor development.

Avoidance and minimisation of biodiversity impacts (which correlates to a reduced biodiversity offset liability) was a key consideration in the alternatives and options analysis as discussed in *section 5.1.2, Chapter 5 (Response to community submissions)* of this Submissions Report. The calculated biodiversity impacts for the project have been based off conservative assumptions and are likely to be substantially less than calculated. EnergyCo remains committed to applying the avoid–minimise–offset hierarchy to reduce environmental impacts and ensure biodiversity outcomes are achieved in an ecologically and economically responsible manner.

The biodiversity offset strategy for the HTP will be developed in accordance with NSW Government policy and the Biodiversity Offset Scheme under the *Biodiversity Conservation Act 2016*.

Offset requirements are determined through the Biodiversity Assessment Method (BAM) and form part of the project's overall environmental management framework. These requirements will be transparently reported as part of the post-approval phase once detailed design and site-specific assessments are complete.

EnergyCo intends to enter into a SODA, which means that NSW DCCEEW would have the responsibility for delivering the biodiversity offsets for the project. The biodiversity offset delivery would be carried out in accordance with the CIS that has been prepared and published by NSW DCCEEW since exhibition of the EIS. This strategy will underpin the implementation of the SODA for

the project and guide the priority areas and actions for investment that are identified for the Hunter region. The CIS has been developed to:

- integrate conservation programs and priorities to optimise delivery of regional conservation outcomes
- protect regionally significant conservation values
- improve ecological connectivity and resilience to climate change
- restore degraded ecosystems and habitats
- contribute to a comprehensive, adequate and representative protected area system
- deliver social benefits for the region.

The CIS considers opportunities to enhance biodiversity outcomes by rebuilding connectivity and resilience and consolidating protected areas, including consideration of land within and surrounding national parks and State forests.

The implementation of the SODA by NSW DCCEEW will ensure that the biodiversity offsets and measures taken will compensate for the unavoidable residual impacts to the required level which will result in overall regional conservation outcomes for affected species and ecosystems. In addition, it is considered that a conservative approach has been taken towards calculation of biodiversity offset credits and accordingly indirect impacts would be adequately catered for under the SODA.

6.20.5 Other matters

Climate change and greenhouse gases – greenhouse gas emissions

Summary of the issues

The Nature Conservation Council raised concern about greenhouse gas (GHG) emissions from the project, particularly those associated with vegetation clearing, and recommended that emissions be offset through the purchase of carbon credits or avoided through route realignment to reduce vegetation loss.

Response

EnergyCo notes the feedback regarding GHG emissions and the suggestion to offset or further reduce emissions associated with vegetation clearing.

The *Technical Report 18 – Air quality and greenhouse gas impact assessment* and *EIS section 22.2, Chapter 22 (Other matters)* includes a quantitative assessment of GHG emissions from construction and operation of the project.

Consistent with the project's design principles, the project's route was selected through a multi-stage corridor assessment process designed to avoid and minimise vegetation clearing wherever practicable. The preferred alignment largely follows existing disturbance such as forestry areas, mining lands and transmission corridors (see *sections 3.4 and 3.5, Chapter 3 (Alternatives and options)* of the EIS). *Section 8.2, Chapter 8 (Biodiversity)* of the EIS outlines design refinements for impact avoidance including but not limited to co-location, micro-siting, spanning and retention of forested gullies.

EnergyCo is committed to managing and reducing project-related emissions in accordance with *section 22.2.5* of the EIS. Opportunities to minimise Scope 1 and 2 emissions include use of energy-efficient plant and equipment, optimisation of construction scheduling to reduce fuel use, and procurement of lower-emission materials where practicable. These commitments complement the project's broader avoidance and minimisation measures for vegetation impacts adopted through route selection and design.

The suggestion that carbon offsets are secured for the project is noted. Under the current NSW regulatory framework, offsets for GHG emissions are not required for linear transmission infrastructure. The project's operation would, however, support long-term emissions reduction across NSW by facilitating the connection and delivery of renewable energy from the Central-West Orana and New England Renewable Energy Zones to the National Electricity Market, contributing to statewide decarbonisation objectives.

6.20.6 Justification and conclusion

Benefits of the project

Summary of issue

The Nature Conservation Council acknowledged that the delivery of the HTP is a precondition for the closure of the remaining NSW coal-fired power plants to meet the NSW government's emission reduction targets. The submission noted further the importance of building renewable energy generation, storage, and transmission in a timely manner to reach reductions targets while minimising the impacts of climate change on our environment. The Nature Conservation Council acknowledges the HTP's role in the achieving the NSW government's emission reduction targets and in supporting the delivery of renewable energy infrastructure.

Response

EnergyCo acknowledges this comment regarding the benefits of the project from the Nature Conservation Council.

6.21 NSW Apiarists' Association Inc.

NSW Apiarists' Association Inc. (NSWAA) provided a submission in response to the public exhibition of the EIS (23 September 2025). The submission raised concerns that the project could impact apiculture by restricting access to floral resources within forested areas. This section provides a summary of the issues raised and consideration of those issues.

6.21.1 Traffic and transport

Impacts to property access

Summary of issue

NSWAA noted that physical access to State forest apiary sites could be severely disrupted during construction due to road closures and restricted forest access. Such interruptions may cause economic hardship for beekeepers who rely on timely access aligned with flowering periods. NSWAA requested that they be engaged during the pre-construction phase to minimise restrictions and schedule works around key seasonal flowering events. It also referenced the HumeLink (SSI-36656827) project as an example of how prolonged site closures have adversely affected apiarists, urging that similar outcomes be avoided under HTP.

Response

It is acknowledged that the construction of the project may cause temporary disruptions to State forests. The Forestry Corporation of NSW and NSWAA would continue to be consulted on construction methodologies and activities as part of continued design development, and prior to and during construction activities to minimise restrictions and schedule works at appropriate times and where feasible.

6.21.2 Biodiversity

Impacts to terrestrial biodiversity

Summary of issue

The NSWAA highlighted that several PCTs containing Spotted Gum (*Corymbia maculata*) would be impacted by the HTP. The submission noted that this species is vital for beekeeping due to its nutrient-rich pollen and winter flowering, which sustains colonies during critical periods. The submission called for the conservation and review of impacted Spotted Gum areas to preserve essential bee forage resources and maintain the ecological conditions underpinning commercial beekeeping.

Response

The project has aimed to avoid and minimise native vegetation clearing, which would minimise impacts on Spotted Gum and associated bee foraging resources. *Section 5.1.2* of this Submissions Report provides an explanation of how the project maximised use of existing cleared areas and avoided areas of biodiversity value where feasible during project development.

6.21.3 Land use and property

Compensation for property impacts

Summary of issue

NSWAA stated that apiary sites subject to permanent loss must be offset through appropriate compensation, provision of alternative sites, or other equitable arrangements. It advocated for a “zero net loss” policy for apiary sites affected by State Significant Developments and requested that EnergyCo collaborate with NSWAA to establish a framework for replacement access and long-term site security on public lands.

Response

EnergyCo has consulted with NSWAA and the Forestry Corporation of NSW to understand the location of apiary sites in the vicinity of the HTP.

EnergyCo understands that there are two active apiary permits located within the project impact area in Olney State Forest.

EnergyCo will continue to consult with NSWAA, the Forestry Corporation of NSW, and the two apiary permit holders to identify suitable alternative sites for the impacted apiaries outside of the construction impact area of the HTP.

6.21.4 Agriculture

General impacts to agricultural land and practices

Summary of issue

The submission noted concern with respect to *Technical Report 5 – Agricultural impact assessment* for failing to identify and assess apiculture as an agricultural land use. NSWAA noted that *Chapter 4 (Existing environment)* of the report does not address the contribution of beekeeping to agricultural productivity within the project impact area. NSWAA argued that apiculture plays a vital role through both honey production and crop pollination services, and that its omission from the assessment understates the project’s broader agricultural impacts.

Response

Technical Report 5 – Agricultural impact assessment of the EIS primarily focuses on the livestock grazing and cropping enterprises within which the project most directly interacts with and impacts. It does not assess impacts to apiculture. Notwithstanding, EnergyCo acknowledges the importance of beekeeping and the role that apiculture plays in honey production and crop pollination services both within the project impact area and beyond.

Based on consultation with the NSWAA and the Forestry Corporation of NSW, EnergyCo understands that there are two active apiary permits located within the project impact area in Olney State Forest. EnergyCo will continue to consult with NSWAA, the Forestry Corporation of NSW, and the two apiary permit holders to identify suitable alternative sites for the impacted apiaries outside of the construction impact area of the HTP.

6.22 Origin

Origin Energy Eraring Pty Ltd (Origin) provided a submission in response to the public exhibition of the EIS (18 September 2025). The submission outlined Origin's interests as the owner and operator of the Eraring Power Station and associated Eraring Battery Energy Storage System (EBESS). This section provides a summary of the issues raised and consideration of those issues.

6.22.1 Engagement

Future community and stakeholder engagement

Summary of issue

Origin raised the need for clear and structured consultation to coordinate construction and operation of the project with ongoing activities at the Eraring Power Station and the EBESS. The submission notes that construction of the project would require outages at the Eraring Power Station and potential outages at the EBESS, and discusses the impacts of the project, including in relation to the closure and eventual demolition and rehabilitation works at the Eraring Power Station. Origin-highlights the importance of maintaining energy security during the transition period and requests information on how the construction of the project would be carried out in parallel with an operating power station. Origin seeks further consultation to understand how decommissioning and rehabilitation works at the Eraring Power Station may need to be adjusted to account for the construction and operation of the project, and to ensure that coordination of the project with works at the Eraring Power Station and the EBESS are captured in detailed design for the project and third-party agreements.

Response

EnergyCo acknowledges Origin's submission and appreciates the detailed feedback on interactions between the HTP, the Eraring Power Station and the EBESS. Origin has been engaged as a key stakeholder through briefings and targeted meetings, and EnergyCo recognises the need for ongoing, detailed coordination as the project moves into detailed design and delivery.

EnergyCo will continue to liaise with Origin to share relevant data, discuss assessment outcomes and understand required mitigations, ensuring that planning for the HTP aligns as far as practicable with existing site schedules, access arrangements and operational considerations. This includes technical matters raised in relation to flooding, groundwater, contamination, cumulative impacts and broader site logistics.

These matters will continue to be addressed through ongoing engagement, a third party agreement and, where appropriate, reflected in updates to design assumptions or management measures documented in the Amendment Report and subsequent project documentation.

6.22.2 Groundwater

Management and mitigation

Summary of issue

Origin requests groundwater impacts to be reviewed and the need for dewatering or the treatment of groundwater during construction to be considered.

Response

EnergyCo acknowledges the request from Origin Energy to review groundwater impacts at Eraring, which was also noted through the regular interface meetings between Origin Energy and EnergyCo. Since exhibition of the EIS, Origin Energy has provided additional baseline groundwater data for the Eraring Power Station which has been reviewed for completeness and for consideration in the identification of the existing environment of the project as it relates to groundwater. The information provided to-date relating to groundwater conditions has been unable to be incorporated in its existing form as part of the Amendment Report for the project; however, EnergyCo will continue to consult with Origin Energy to obtain additional data relating to groundwater, which will be incorporated into the detailed design of the project, where it is identified as providing updated information of the existing groundwater conditions at the Eraring Power Station.

6.22.3 Flooding

General flooding impacts

Summary of issue

Origin raised concerns that the flood model used for the project may be based on incorrect drainage assumptions for the Eraring Power Station and the Eraring Battery Energy Storage System areas. It noted that the modelling appears to omit additional catchments approved for diversion under Project Approval 07_0084. Origin also identified potential increases in flood depths caused by the project, which could affect existing infrastructure located downstream. The submission requests further consultation to review the modelling and its implications for site operations and infrastructure management during construction and operation of the project.

Response

Eraring Power Station

The assessment of flood behaviour in the vicinity of the proposed extension to the Eraring substation as part of HTP (which is located immediately west of the Eraring Power Station) was based on:

- work-as-executed drawings obtained from Transgrid of the piped drainage system that was constructed as part of the Eraring substation, which included a watercourse diversion between the Eraring substation and Eraring Power Station via a 2,400-millimetre diameter pipe
- LIDAR survey captured in 2014 showing the alignment and dimensions of flowpaths that would influence flood behaviour in the vicinity of the Eraring substation
- aerial photography of the catchment draining to and through the Eraring substation

- observations made during a field inspection of the Eraring substation and surrounding area.

While details of the drainage system associated with the Eraring Power Station were requested from Origin Energy in June 2024, no information was made available for inclusion in the flood assessment for the EIS. For the purpose of defining the magnitude of overland flow in the vicinity of the proposed extension to the Eraring substation, conservative assumptions were therefore made with regard to the layout and dimensions of the drainage system within the Eraring Power Station.

Subsequent to the preparation of *Technical Report 12 (Flooding impact assessment)* of the EIS, Origin Energy provided details of the piped drainage network that controls runoff from areas draining to and through the Eraring Power Station. These details have been used to update the flood models that have been used to define flood behaviour in the vicinity of the Eraring substation under pre- and post-project conditions and to assess the impact of the proposed Eraring substation extension on flood behaviour. The assessment of flood behaviour under post-project conditions was based on a concept design of the Eraring substation extension that was prepared by Transgrid (the operators of the existing Eraring substation) and presented in the EIS.

An assessment of the impact of the proposed extension of the Eraring substation on flood behaviour in the vicinity of the Eraring Power Station is presented in *Technical Report 12 – Flooding impact assessment* of the EIS, the key findings of which were presented by EnergyCo to Origin Energy at a meeting held on 29 August 2025.

Updated flooding modelling has been undertaken taking into consideration the additional data provided by Origin Energy in *Appendix L (Flooding impact assessment addendum)* of the Amendment Report. Based on the outcomes of the flood impact reassessment, the impact of the project on flood behaviour in the vicinity of the Eraring Power Station can be summarised as follows:

- for all floods up to 1 per cent (1 in 1,00) Annual Exceedance Probability in magnitude there would be a slight reduction on the depth of inundation at the Eraring Power Station
- during the Probable Maximum Flood (PMF) there would be an increase in the depth of inundation along an overland flow path that runs adjacent to the northwestern portion of the Eraring Power Station from 1.2 metres (pre-proposal conditions) to 1.26 metres (post-proposal conditions).

It is noted that the likelihood of the PMF occurring over the remaining operational life of the Eraring Power Station is extremely low.

The above findings in the Amendment Report show that while impacts are generally less than those based on the assessment that was presented in *Technical Report 12 – Flooding impact assessment* of the EIS, there would still be an increase in the depth of inundation during the PMF along the section of the eastern overland flowpath where it runs immediately adjacent to the Eraring Power Station.

In accordance with mitigation measure FL8 in *Table 19.8* of the EIS, EnergyCo will continue to liaise with Origin Energy to gain an understanding of the impact (if any) the above increase in depth of inundation during the PMF could have on the operation of the Eraring Power Station, and therefore the scope of mitigation measures that may be required.

Eraring BESS

Given the location of the Eraring BESS project, the HTP would not significantly alter flooding and drainage patterns in the immediate vicinity of the Eraring substation extension that is proposed as part of HTP.

Updated flooding modelling has been undertaken taking into consideration the additional data on the drainage system provided by Origin Energy in *Appendix L (Flooding impact assessment addendum)* of the Amendment Report. The updated flood modelling found the project would not adversely impact on flood behaviour at the location of the Eraring BESS or its associated substation which is consistent with *Technical Report 12 (Flooding impact assessment)* of the EIS

Proposed catchment diversion from the Eraring Ash Dam Expansion Project under Project Approval 07_0084

EnergyCo notes the approved modification under Application Number MP07_0084-Mod-1 to increase the storage capacity of the Eraring Power Station Ash Dam, the scope of which is presented in the report entitled *Ash Dam Augmentation Project Environmental Assessment* (AECOM, 2018). Having reviewed the proposed scope of work presented in AECOM, 2018. EnergyCo notes that the approved modification includes the diversion of runoff from an area upslope of the ash dam, which would be collected in a receiving pond and diverted via an underground pipeline to a discharge point that is located within the catchment that drains to the Eraring substation. EnergyCo also notes that the underground pipeline would comprise a 300 millimetre diameter PVC pipe that would have a maximum flow rate of 240 cubic metres per hour (equivalent to less than 0.1 cubic metres per second).

The maximum flow rate in the underground pipe diversion would have negligible effect on flood behaviour in the vicinity of the Eraring substation and its proposed extension as part of HTP.

6.22.4 Contamination

Contamination of groundwater

Summary of issue

Origin requested expansion of the identified contaminants of potential concern within the project impact area associated with upwelling of groundwater.

Response

EnergyCo notes that in the interface meetings between Origin and EnergyCo, Origin requested that the contamination assessment for the project, provided as *Technical Report 13 - Contamination preliminary site investigation* of the EIS, be updated to reflect the below at the Eraring Power Station:

- include heavy metals as a potential contamination source
- include ecological receptors as a sensitive receiver as part of the preliminary risk ranking in the assessment.

The contamination assessment has since been updated to include these adjustments and is provided in *section 5.14, Chapter 5 (Assessment of impacts)* of the Amendment Report.

6.23 Pokolbin Mountains Road Residents, Landholders and Users Group

The Pokolbin Mountains Road Residents, Landholders and Users Group provided a submission in response to the public exhibition of the EIS. The submission outlined concerns regarding the consultation undertaken for the project and that issues previously raised by the group were not acknowledged or addressed in the EIS. This section provides a summary of the issues raised and consideration of those issues.

6.23.1 Engagement

Consultation during the preparation of the EIS

Summary of issue

The Pokolbin Mountains Road Residents, Landholders and Users Group stated that the EIS fails to capture or respond to issues raised during earlier consultation between EnergyCo and affected landowners along Pokolbin Mountains Road. It highlighted a lack of transparency in how stakeholder feedback was documented and requested that the engagement record more accurately reflect discussions and concerns raised by the community. The group reaffirmed its willingness to engage constructively and encouraged individual submissions from members to ensure their perspectives are represented.

Response

EnergyCo acknowledges the Pokolbin Mountains Road Residents, Landholders and Users Group's feedback regarding consultation undertaken during preparation of the EIS and the concerns raised about how earlier discussions and issues were reflected in the exhibited documentation.

Engagement undertaken to support the EIS was informed by the project's consultation approach and the information available at the time.

The matters raised in the group's submission have been considered through the Submissions Report and Amendment Report processes, including reviewing how stakeholder feedback has been captured and where clarification may be required in updated assessment material. EnergyCo appreciates the group's continued willingness to engage and will continue to share information through established communication channels as the project progresses.

A number of individual submissions have been received in relation to Pokolbin Mountains Road which have been addressed in *Chapter 5 (Response to community submissions)* of this Submissions Report. The primary concerns raised and where they have been addressed are:

- project description – construction – further detail on proposed upgrades, concerns about the use of Pokolbin Mountains Road as an access road, alternative routes considered, suggestion that EnergyCo should contribute to improvements along Pokolbin Mountains Road (refer to *section 5.2.1* of this Submissions Report)
- traffic and transport – incorrect number of residences and businesses identified, incorrect characterisation of the use of the road, lack of consideration of active transport, recreational

uses of the road, suitability of the road for heavy vehicles, adequacy of mitigation measures (refer to *sections 5.8.1 to 5.8.3* of this Submissions Report)

- adequacy of the EIS – inconsistencies in relation to description and assessment of the use, upgrades and passing bays along Pokolbin Mountains Road between various technical reports (refer to *section 5.3.1* of this Submissions Report)
- Consultation during project development – concerns about transparency and access to information (refer to *section 5.4.2* of this Submissions Report)
- Consultation during preparation of the EIS – community feedback gathered during engagement was not clearly visible in the EIS, e.g. local issues regarding access, amenity and property (*section 5.4.3* of this Submissions Report)
- Future community and stakeholder engagement – suggestions for consultation with directly affected landowners, residents and businesses during the preparation of post-approval management plans (refer to *section 5.4.5* of this Submissions Report)
- Landscape and visual – lack of a detailed site-specific assessment from key tourism vantage points such as Pokolbin Mountain lookout and the main approaches along Pokolbin Mountains Road (refer to *section 5.7.2* of this Submissions Report)
- Water quality impacts – impacts of erosion and sedimentation on Muggyrang Creek and Foxy Gully from use of Pokolbin Mountains Road (refer to *section 5.14.2* of this Submissions Report)
- Soils and contamination – lack of consideration of existing local constraints on soil and erosion (refer to *section 5.15.1* of this Submissions Report)
- Economics – impacts on local businesses on Pokolbin Mountains Road (refer to *section 5.17.2* of this Submissions Report)
- Air quality – consideration of dust impacts from construction vehicles and road upgrades (refer to *section 5.17.4 and 5.17.5* of this Submissions Report).

In response to further engagement with the Pokolbin Mountains Road Residents, Landholders and Users Group, mitigation measures were developed to minimise impacts to the residents on Pokolbin Mountains Road including:

- a property access sub plan as part of the traffic management plan will be prepared for Pokolbin Mountains Road, parts of Mount View Road and Mount Baker Road, to manage construction vehicle access during construction to assist in minimising impacts to property access and the controls to maintain a suitable level of usability of the road during construction (for example, drainage) (mitigation measure TT14)
- a community communication strategy will establish the approaches to facilitating communication between the proponent and the community during construction including implementing real time traffic monitoring and SMS alerts for stakeholders that may be directly affected by changed including community groups (such as Pokolbin Mountain Road Residents Group (mitigation measure S02)
- management measures to prevent or minimise dust generation and impacts on vineyards from adjacent road upgrades and construction vehicle movements (mitigation measure AQ5).

Refer to *Appendix D (Updated mitigation measures)* of the Amendment Report for further details on the mitigation measures.

6.24 University of Newcastle Centre for Conservation Science

The University of Newcastle Centre for Conservation Science provided a submission in response to the public exhibition of the EIS on an unspecified date. The submission raised concerns regarding the corridor selection process and the impact to the Littlejohn's Tree Frog. This section provides a summary of the issues raised and consideration of those issues.

6.24.1 Alternatives and options

Selection of the preferred route option

Summary of issue

The University of Newcastle Centre for Conservation Science raised concerns that the avoidance of visual impacts have been prioritised over the avoidance of impacts to threatened species in the selection of the HTP corridor. The submission stated further that avoidance of visual amenity impacts have been acknowledged in the EIS as key advantage of the proposed route for the project despite not being noted as a strategic priority to avoid in the route selection process. The submission also raised concern that impacts to threatened species, including associated offset costs, were not appropriately discussed nor communicated during early public consultation as a trade-off for avoidance of visual impacts. It was also requested that any future consultation or project communication should include the biodiversity impacts of the preferred HTP corridor and the required offsets.

Response

EnergyCo acknowledges the University of Newcastle Centre for Conservation Science is concerned that amenity impacts have been prioritised over biodiversity impacts.

A detailed description of the alternatives considered for the project and the justification for the preferred transmission line alignment was provided in *Chapter 3 (Alternatives and options)* of the EIS. The alternatives analysis followed a holistic, multi-criteria assessment that considered impacts to people and the environment, technical feasibility and cost.

Avoidance and minimisation of biodiversity impacts was a key consideration in the alternatives and options analysis. High conservation value areas such as Watagans National Park, Werakata National Park, Warrawolong Flora Reserve and existing biodiversity offset areas associated with the Bulga mining complex were avoided, as discussed in *section 3.3* and *section 8.2, Chapter 8 (Biodiversity)* of the EIS. In addition, the better-quality remnants of the Central Hunter Valley Eucalypt Forest and Woodland and Warkworth Sands Woodland of the Hunter Valley TECs were avoided that provide habitat for threatened species and important habitat for the Regent Honeyeater and Swift Parrot.

Corridor alternatives were identified based on EnergyCo's planning pillars and project objectives developed specifically for the HTP. EnergyCo's key planning pillars guide the corridor selection process for its projects in NSW. These pillars and principles align with the requirements of the NSW *Electricity Infrastructure Investment Act 2020* and were presented in *Table 3.3* of the EIS. The 'people' pillar is defined as 'positive benefits and negative impacts on people's wellbeing, amenity and

quality of life' and its corresponding planning principle (among others) is to 'minimise negative impacts on the visual amenity of residences and landscapes'. The 'environment' planning pillar is defined as 'impacts to natural and cultural environments' and its corresponding planning principle (among others) is to 'minimise negative impacts on biodiversity values'.

EnergyCo's project objectives were to 'minimise significant land use conflicts and impacts on people and environment' (refer to *section 3.3* of the EIS).

Three strategic corridors were selected (North, Central, South) with 19 route options identified and assessed, as outlined in *section 3.3* of the EIS. Route option South A was selected as the preferred route for the HTP.

The advantages and disadvantages of Route option South A were outlined in *Table 3.5* of the EIS. It was concluded that there would be fewer impacts to people as it crosses less private land and is situated further away from residential dwellings and suburbs. It was also identified that there was greater capacity for colocation with existing transmission lines and the utilisation of large amounts of public land and potentially available mining land. EnergyCo acknowledged that a disadvantage of route option South A would be the introduction of new electricity transmission infrastructure through vegetated areas of State forests that would result in impacts on biodiversity, although less than route options North A and Central A which would impact Hunter Valley TECs.

Three transmission alignment alternatives (Alignment A, B and C) within route option South A were then assessed using the project objectives and additional environmental considerations that included criteria to 'minimise impacts on unique or sensitive biodiversity and cultural values and offset unavoidable biodiversity impacts' and 'minimise visual amenity impacts through thoughtful design and application of mitigation measures' (refer to *Table 3.6* of the EIS). Alignment A was identified as the preferred alignment for the HTP.

EnergyCo acknowledges that in some locations competing environmental, social and technical constraints occur. In these instances, EnergyCo has adopted a balanced and transparent approach to determine the most appropriate alignment, ensuring that decisions are informed by data, and in consultation with affected stakeholders.

As with other major projects, unavoidable impacts to biodiversity are required to be offset financially per the NSW *Biodiversity Conservation Act 2016* (BC Act). It is acknowledged that discussions of offset liabilities were not carried out as part of early consultation on the project, however further analysis was required to understand the impacts to threatened species and offset liabilities of different route options. Desktop assessment and limited survey were carried out to further understand the potential biodiversity offset liabilities of each route option, and these were included in a comparative analysis alongside other considerations to determine the preferred route option. Further analysis has since been carried out as part of *Technical Report 1 – Biodiversity development assessment report* of the EIS to determine impacts to threatened species and offset liabilities of the project. This report was placed on public exhibition as part of the exhibition of the EIS for 28 days between 27 August to 24 September 2025.

The estimated biodiversity credit liability requirements for the HTP have been calculated using the *Biodiversity Assessment Method Calculator* (BAM-C). The total credit liability was calculated at 234,725 in the EIS (refer to *Table 8.16* of the EIS). The total credit liability for the amended project is

provided in *section 11 of Appendix E (Revised biodiversity development assessment report)* of the Amendment Report.

EnergyCo intends to enter into a SODA with the Secretary of the NSW Department of Climate Change, Energy, Environment and Water (NSW DCCEEW) for the HTP. Under this agreement, responsibility for delivering biodiversity offsets will be transferred to NSW DCCEEW with commensurate funding from EnergyCo.

Transmission line design – underground transmission lines

Summary of issue

The University of Newcastle Centre for Conservation Science expressed concerns that the undergrounding of transmission lines has not been explored appropriately as an option to avoid impacts to threatened species and minimise visual amenity impacts. Specifically, the submission stated that the undergrounding of transmission lines would avoid the significant costs associated with biodiversity offsets contrary to the EIS' representation of underground transmission lines and associated repair costs as the more expensive option.

Response

Options to underground the transmission infrastructure were considered in *section 3.2, Chapter 3 (Alternatives and options)* of the EIS.

EnergyCo acknowledged the benefits of undergrounding compared to overhead transmission infrastructure can typically include:

- reduced visual and noise impacts
- no impacts on aerial operations
- generally lower electric and magnetic fields
- lower risk of damage to the transmission lines due to external factors (e.g. extreme weather, falling trees, wildlife, bushfires, vehicles).

A comparison of overhead and underground transmission lines is provided in *Table 3.2* of the EIS. The key considerations assessed included constructability, environmental considerations, reliability, operations and maintenance, easement requirements, vegetation management, ground disturbance, effective circuit length, charging current, construction time, and value for money.

An overhead transmission line solution was the preferred solution for the HTP for the reasons listed in *section 3.2* of the EIS. These reasons were that an overhead transmission line would be:

- more flexible to respond to the significant changes in terrain
- better suited to span multiple water crossings rather than the need to provide a submarine cable
- better suited to minimise the structures required within poor geological conditions, this would be limited to tower structures only rather than a continuous excavation of multiple trenches or tunnels
- easier and faster to repair than an underground option in the event of damage
- less intrusive than an underground option, with ground disturbance required at tower footings and where vegetation is required to be cleared in the transmission line easement
- more effective over hundreds of kilometres than an underground option
- significantly lower in cost, reducing overall costs for the community and consumers

- faster in construction timeframes, reducing the impacts associated with construction on the community and delivering this critical infrastructure as soon as possible to benefit consumers.

This is generally consistent with the findings of the parliamentary inquiry into the feasibility of undergrounding transmission infrastructure for renewable energy projects published in August 2023.

6.24.2 Biodiversity

Impacts on frogs

Summary of issue

The submission expressed concern about the project's impact on the Watagans Mountain's population of the Littlejohn's Tree Frog. The submission stated that the location of the proposed transmission towers and Olney switching station would impact the connectivity of an already fragmented population of the Littlejohn's Tree Frog. The project would also directly disturb known artificial ponds and breeding sites that comprise critical habitat for the species. The submission notes, furthermore, that these impacts would extend to other frog species that utilise the same habitat as the Littlejohn's Tree Frog including the Red-crowned Toadlets (*Pseudophryne australis*), Southern Stuttering Frogs (*Mixophyes australis*) and the Giant Burrowing Frog (*Heleioporus australiacus*). The submission raises additional concerns that sedimentation impacts associated with construction activities would impact aquatic frog species. The submission makes the assertion that impacts to these species have not been adequately considered in the EIS and the potential impact on artificial breeding ponds and habitat fragmentation would significantly impact the entire population of the Littlejohn's Tree Frog. The submission stated that translocation of the species is not viable for the species based on their own research which has shown such efforts to be unsuccessful.

The submission stated that the remoteness of the Olney switching station option has implications for fire management and access for firefighting activities with associated impacts to the Littlejohn's Tree Frog noting that wildfires are a known listed threat for the species. The submission requested that an alternative site is used for the proposed Olney switching station.

Response

During project development, the transmission line was realigned within State Forest of the Watagan Mountains to avoid threatened frog breeding habitats. Despite this, it is acknowledged that the project would result in potential direct and indirect impacts on threatened amphibian species recorded or assumed present within the disturbance area including the Giant Barred Frog, Giant Burrowing Frog, Littlejohn's Tree Frog, Red-crowned Toadlet and Southern Stuttering Frog.

Following public exhibition of the EIS and in response to consultation carried out with species experts and regulators, amendments and refinements to the project have been made to further minimise impacts to threatened species, particularly frog species, within the Olney State Forest (refer to *Chapter 3 (Actions taken since exhibition)* of this Submissions Report). This has included the redesign of tower and related infrastructure locations as detailed in the Amendment Report as well as *sections 9.1.3.5 and 9.1.3.6 of Appendix D (Revised biodiversity development assessment report)* of the Amendment Report. These changes are also reflected in the disturbance areas and no-go zones

mapped in *Appendix D (Revised biodiversity development assessment report)* prepared for the Amendment Report. Importantly, the project has avoided 60 of 62 (or 96 per cent) of the recently constructed breeding ponds for Littlejohn's Tree Frog.

Appendix D (Revised biodiversity development assessment report) contains expanded and detailed information on the likely impacts to threatened species such as Littlejohn's Tree Frog, Southern Stuttering Frog and Giant Burrowing Frog. Each species has been assessed in detail by a range of experts within the project team or independently engaged for the project. Each species has had an impact assessment undertaken and management / mitigation measures proposed. Additional more detailed impact assessment is provided in sections 9.1.3.5 and 9.1.3.6 of *Appendix D (Revised biodiversity development assessment report)* for Littlejohn's Tree Frog and Stuttering Frog respectively, as they have been considered threatened fauna species at risk of an SAIL.

Additional specific commitments to continue to avoid or minimise impacts to threatened frog species have been included in the updated mitigation measures (refer to *Appendix D (Updated mitigation measures)* of the Amendment Report). This includes consideration of micro-siting to continue to avoid impact to amphibian breeding habitats during detailed design and potential inclusion of supplementary breeding ponds or connectivity measures in the design. The need for specific erosion and sediment control measures to be implemented to prevent sedimentation of potential amphibian breeding habitats during construction is also reflected in an updated mitigation measure for the amphibian management plan (refer to *Appendix D (Updated mitigation measures)* of the Amendment Report). These measures would be guided by an erosion and sediment control plan that has been prepared to provide further detail on proposed sediment and erosion control management for the project (provided in *Appendix Q of Appendix E (Revised biodiversity development assessment report)* of the Amendment Report).

Translocation of threatened frogs is not currently proposed as part of the biodiversity approach for the project.

Where residual impacts remain, offsets via the SODA have been identified. This will include substantial investment in conservation outcomes for these species.

While bushfires are a known threat for Littlejohn's Tree Frog, it is unlikely that the project itself would result in an increased threat of unmanaged or uncontrolled wildfire. The project has proposed asset protection zones, emergency access routes and ongoing bushfire management measures as relevant to minimise bushfire risk. *Section 5.16.2, Chapter 5 (Response to community submissions)* of this Submissions Report provides further discussion on the bushfire risks and management approaches proposed for the project.

6.25 Xatech International Pty Ltd

Xatech International Pty Ltd (Xatech) provided a submission in response to the public exhibition of the EIS (August 2025). The submission proposed the use of different conductor technologies on the project. This section provides a summary of the issues raised and consideration of those issues.

6.25.1 Issues beyond the scope of this EIS

Summary of issue

The submission proposed that the HTP adopt advanced conductor technologies – specifically High Temperature Low Slag (HTLS) composite-core conductors – to replace legacy aluminium-conductor designs. It identified multiple advantages of these technologies.

Xatech indicated their willingness to collaborate with EnergyCo to identify suitable conductor specifications and optimise transmission line design to achieve both economic and environmental benefits for the HTP.

Response

The selection of conductor types, procurement specifications, detailed transmission line design and construction methodology are post-approval matters and are therefore outside the scope of the EIS. The EIS does not evaluate or compare alternative proprietary technologies.

Any future procurement or design refinements would be undertaken in accordance with relevant technical standards.

6.26 Yancoal Australia Ltd

Yancoal Australia Ltd (Yancoal) provided a submission in response to the public exhibition of the EIS (23 September 2025). The submission outlined concerns regarding the location of the transmission line alignment and associated implications for operational planning and land management within its lease area. The submission acknowledged that concerns regarding the placement of temporary support sites and laydown areas have been addressed. This section provides a summary of the issues raised and consideration of those issues.

6.26.1 Alternatives and options

Transmission line design – alignment alternatives

Summary of issue

The submission explained that Yancoal and EnergyCo had previously agreed on a transmission line alignment designed to minimise impacts to Mount Thorley Warkworth (MTW) operations, referred to as the “Agreed Alignment.” However, the alignment shown in the exhibited EIS (“EIS Alignment”) was inconsistent with that version and included discontinued options not relevant to the agreed corridor.

Yancoal observed that while the EIS refers to refinements near the Golden Highway and claims to have reduced agricultural impacts based on stakeholder feedback, these refinements are not reflected in the exhibited alignment. It requested that EnergyCo resolve these discrepancies before approval to ensure that the project accurately reflects the previously agreed alignment and associated impact mitigation commitments.

Response

The above concerns regarding the transmission line alignment in the vicinity of MTW have been discussed with Yancoal and have been addressed post exhibition of the EIS in amendments to the project, as described in *Chapter 3 (Description of amendments and refinements)* and *Appendix A (Updated project description)* of the Amendment Report.

6.26.2 Project description construction

Construction support sites

Summary of issue

Yancoal acknowledged that several of its earlier concerns regarding the location of temporary support sites and laydown areas have been addressed by EnergyCo in the final EIS alignment and construction impact area. The company welcomed these refinements but maintained that remaining matters relating to alignment confirmation and third-party agreement finalisation should be resolved before project approval is granted.

Response

EnergyCo acknowledges this comment regarding the location of the construction support sites from Yancoal.

Regarding the transmission line alignment, please refer to the response in *section 6.26.1* of this Submissions Report.

EnergyCo is working with Yancoal to finalise and execute a third-party agreement as soon as possible.

6.26.3 Aboriginal heritage

Impact assessment approach

Summary of issue

Yancoal expressed concern that discrepancies between the agreed alignment and the alignment shown in the EIS make it unclear how the detailed Aboriginal heritage assessment has avoided or minimised impacts to known cultural heritage sites within MTW-owned land. The submission requested clarification of how alignment refinements have been considered in the heritage impact assessment and whether avoidance measures have been properly applied to the correct alignment.

Response

The agreed alignment is reflected in the amended project as presented in the Amendment Report (refer to *Chapter 3 (Description of amendments and refinements)* of the Amendment Report). The Aboriginal cultural heritage assessment (ACHA) addendum (refer to *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report) has assessed the agreed alignment within MTW owned land. Additional survey has been carried out as part of the *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report for the proposed amendments or where access was possible to fill gaps in the field survey coverage undertaken for *Technical Report 2 – Aboriginal cultural heritage assessment* of the EIS as a result of improved land access. The completion of field surveys in currently unsurveyed areas where access is currently not possible would be undertaken in consultation with Heritage NSW, Yancoal and the registered Aboriginal parties (RAPs).

Notwithstanding, *Technical Report 2 – Aboriginal cultural heritage assessment* of the EIS and *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report have identified Aboriginal objects, sites and places within MTW-owned land, including through reviews of previous investigations and through field survey. The potential impacts to Aboriginal objects, sites and places was assessed in *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report using a refined approach that considered disturbance areas rather than the full extent of the amended project impact area. The disturbance areas have been developed as part of *Appendix E (Revised biodiversity development assessment report)* of the Amendment Report. Potential direct and indirect impacts to Aboriginal objects, sites and places as a result of the project are outlined in *Chapter 8 (Potential and cumulative impacts)* of *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report, with further detail on each site included in *Appendix D.4 (Potential impacts – additional information and tables)* of *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report. This approach has resulted in an understanding of sites that would be completely or partially impacted by construction of the project, and sites within the amended project impact area that would not be impacted due to being located outside of disturbance areas. The Aboriginal objects, sites and places within MTW-owned land that would be completely or partially impacted by construction of the project, and the objects, sites and places that are located within the amended project impact area but would not be impacted, are shown in *Figure 8.1* of *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report.

Furthermore, *Appendix D.4 (Existing cultural materials management data)* of *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report indicates that Aboriginal heritage management plan MTW SSD-6464 & SSD-6465 (Yancoal Australia Pty Ltd 2017) was reviewed to inform the management of previously documented Aboriginal objects, sites and places within the amended project impact area. *Table D.12* of *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report outlines the existing documented cultural materials management from this document that have been applied to the project. The proposed management of Aboriginal objects, sites and places now incorporates existing management requirements and processes for established projects and places that intersect with the project impact area including existing measures for objects, sites and places within MTW-owned land (refer to *Appendix E (Post approval requirements – updated guiding principles)* of *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report). As such, through mitigation measures outlined in

section 9.5 of Appendix F (*Aboriginal cultural heritage assessment addendum*) of the Amendment Report as well as the application of existing management measures, known cultural heritage sites within MTW-owned land would be appropriately managed.

6.26.4 Land use and property

Property acquisition/leasing – general

Summary of issue

The submission outlined that MTW is an integrated mining operation approved under SSD-6464 and SSD-6465 and managed under Consolidated Coal Lease CCL753. Yancoal stated that HTP would require the acquisition of easements over approximately 53 hectares of land owned by MTW entities, of which about 36 hectares fall within CCL753.

Yancoal noted that commercial discussions with EnergyCo prior to EIS exhibition had resulted in an “Agreed Alignment” intended to minimise impacts on Yancoal’s land and operations; however, the alignment presented in the EIS differed from that version. The submission requested that construction across MTW land not commence until the final alignment and easement locations are agreed and formalised through a third-party agreement. It also sought that this agreement includes provisions addressing work health and safety management, rail movements, and agricultural lessees operating on Yancoal-owned land, to the satisfaction of the Resources Regulator and the Secretary of DPHI.

Response

Where the project crosses private property, EnergyCo’s priority is to work directly with the landowners to negotiate an easement. The easement agreement will outline the rights and responsibilities of both parties for the ongoing use of the land, including land management responsibilities, as well as compensation.

EnergyCo is committed to engaging nearby infrastructure operators, including Yancoal, during detailed design of the HTP such that any interface risks – such as restrictions on agricultural operations, and other work, safety and compliance issues – are appropriately managed. Measures to manage interference impacts with mining infrastructure and obligations under existing approvals will be detailed in a third-party agreement to be developed in consultation with infrastructure operators.

Impact associated with the timing of activities will be resolved third-party agreement inform the sequencing of construction activities which EnergyCo is seeking to finalise and execute with Yancoal.

6.26.5 Hazards and risks

General hazards and risks

Summary of issue

Yancoal stated that the alignment approved for construction must account for multiple obligations, rights, and land uses under CCL753 and SSD-6464. These include environmental, biodiversity, heritage, management, and reporting requirements, as well as work health and safety duties, coal exploration rights, and agricultural activities undertaken directly or through lessees and licensees.

The submission raised concern that the EIS does not adequately consider how the HTP may interact with these obligations, particularly the potential for conflicts with statutory requirements under the *NSW Work Health and Safety (Mines and Petroleum Sites) Act 2013*. It also noted that the EIS fails to address electrical earthing, lightning, and induction risks that could affect mine workers, fixed and mobile plant and equipment, rail operations, and agricultural lessees and/or licensees operating on land owned by MTW entities. Yancoal requested that these matters be properly assessed and mitigated through project conditions or agreements prior to construction.

Response

EnergyCo acknowledges Yancoal's comments regarding work health and safety obligations, mining and agricultural operations under CCL753 and SSD-6464, and the need to manage interfaces between MTW activities and the transmission infrastructure. These matters will be addressed through detailed design and formalised in third-party agreements, which will set out responsibilities, site access arrangements and protocols to ensure risks to mine workers, equipment, rail activities and agricultural lessees/licensees are managed to as low as reasonably practicable.

The EMF assessment (*Technical Report 17 – Electric and magnetic fields assessment*) evaluated the expected electric and magnetic field levels generated by the 500 kV double-circuit transmission line under all operating conditions. Results confirmed that predicted EMF levels are well below the ICNIRP general-public reference limits and comply with Australian and international exposure standards. The project has been designed to minimise induction effects and electrical interference through appropriate tower configuration, conductor spacing and grounding design in accordance with AS/NZS 7000 Overhead Line Design and Transgrid's network safety standards. The HTP D&C Contractor will prepare a low-frequency induction study along the transmission corridor for assessing EMF or induction of fences, property, community and all third-party services.

EnergyCo will consult with nearby infrastructure operators, including Yancoal, during detailed design to ensure any interface risks – such as electrical induction, earthing compatibility and equipment shielding – are appropriately managed.

7

Response to local council submissions

7 Response to local council submissions

This section outlines the issues raised in submissions from local councils and provides responses. The issues raised in these submissions have been summarised and grouped generally under the same issues categories as the public submissions.

7.1 Cessnock City Council

7.1.1 Alternatives and options

Alternative access routes considered

Summary of issue

Cessnock City Council identified that the construction access routes pass through established local centres such as Kurri Kurri and Cessnock, and pass by a number of sensitive land uses such as schools. Cessnock City Council stated that the environmental impact statement (EIS) would benefit from an analysis of alternative routes that may have been considered and reasons why they were not preferred. Particular reference is made to any alternative routes from the Hunter Expressway to Cessnock from the east (including Hart Road) and any routes from the Hunter Expressway from the north (including Wine Country Drive access) to either Cessnock, Broke Road, or McDonalds Road.

Response

Construction access routes are roads that provide access to/from the construction impact area, construction support sites and the State road network. Beyond this point, construction traffic is expected to diminish as it is distributed across the broader road network (including the Hunter Expressway).

The construction access routes have been refined and presented in the revised project description in *Appendix A* of the Amendment Report and *Appendix H (Revised traffic and transport impact assessment)* of the Amendment Report. The selection of construction access routes was informed by a review of the concept design and early construction planning and has:

- prioritised roads that provide connection to construction support sites, the construction impact area (and access tracks determined in consultation with landowners) and broader State and regional road network
- been informed by impact assessment outcomes, including level of service, turn warrant and sight distance assessments

- determined in consultation with relevant stakeholders including Transport for NSW and local councils.

It is acknowledged that the project would necessitate the use of sealed and unsealed local and Crown roads, particularly to access forestry roads and where topography or other environmental constraints limit access along the Hunter Transmission Project (HTP, or project) corridor.

Construction access routes within the Cessnock local government area provide access to/from the central portion of the HTP corridor, which would be primarily supported by the Wollombi Road construction support site.

The EIS identified a route from the east that followed State Road Route B68, which passes through Kurri Kurri. This route would not be used by construction vehicles travelling between construction support sites and the HTP corridor. This is reflected in *Appendix A (Updated project description)* of the Amendment Report.

Construction vehicles accessing the Wollombi Road construction support site would utilise State and regional roads to travel through the Cessnock local centre. Avoidance of the State and regional roads in this instance would require increased reliance on local roads by heavy vehicles to travel to/from Wine Country Road, Broke Road and Wollombi Road. This is not a preferred outcome and has not been considered further.

7.1.2 Project description (construction)

Construction access routes

Summary of issue

Cessnock City Council acknowledged the proposed routes to access the project impact area within the local government area (LGA).

Council noted that many of the proposed access roads are narrow, partially unsealed, and have shallow culverts. Council noted that the proposed routes would affect roads with varying grades and conditions, impacting not only the roads themselves but also bridges, culverts and drainage. It was noted that while pavements are currently in good-to-fair condition, some are not suitable for regular heavy vehicle traffic from a design and safety standpoint. Council raised particular concern with Cedar Creek Road, Hayes Road (Mf1 Road), Mount View Road, and Pokolbin Mountains Road.

Council acknowledged that the project includes proposals for widening and new intersection treatments on local roads, with specific upgrades listed in *Table 4.9* of the EIS.

Council recognised EnergyCo's intention to utilise approval mechanisms for these works at a later date under section 138 of the *NSW Roads Act 1993* (Roads Act) and noted that EnergyCo has initiated preliminary discussions with regards to this with Council. However, Council noted that given the known constraints and the assumption that significant works (including clearing, earthworks, and bridge/culvert upgrades) would likely be necessary, that the potential significant environmental impacts should be addressed at the current stage of development to avoid issues arising later during the secondary approvals process (that is, utilising section 138 of the Roads Act).

Response

As acknowledged in *section 7.1.1* of this Submissions Report, the project would require the use of sealed and unsealed local roads, particularly to access forestry roads and where topography or other environmental constraints limit access along the HTP corridor. Some of these roads (or sections of) are narrow. It is also acknowledged that local roads have been built to accommodate lower volumes of traffic and that the increase in vehicles due to construction traffic would have an impact on road condition.

The construction access routes have been refined and presented in the revised project description in Appendix A of the Amendment Report and *Appendix H (Revised traffic and transport impact assessment)* of the Amendment Report. In addition to these refinements, clarifications on the scope and location of local road and intersection upgrades have been provided in the revised project description (*section A3.5, Appendix A of the Amendment Report*) and *section 5.3.12 of Appendix H (Revised traffic and transport impact assessment)* of the Amendment Report. These works have been included in the construction impact area to allow these works to proceed as part of the project, and strategic concept designs for the intersection upgrades have been provided in *Appendix D of Appendix H (Revised traffic and transport impact assessment)* of the Amendment Report. EnergyCo have provided this information to Cessnock City Council to commence the consultation process on the designs for identified road works. In doing so, it is acknowledged that detailed design of these works would take into further consideration factors such as road condition, drainage issues and road width to confirm the required works in consultation with Cessnock City Council.

With respect to the Roads Act, approvals under section 138 of the Roads Act are only required where works are proposed on classified roads or Crown roads (which typically excludes local roads) by virtue of section 5 of Schedule 2 of the Roads Act. *Appendix C (Statutory compliance)* of the EIS states “By reason of section 5 of schedule 2 of the Roads Act, the proponent is not required to obtain consent to carry out work on unclassified roads, unless they are a Crown Road. The proponent will however require consent to undertake work where this occurs on or over classified roads.” Notwithstanding the legal exemption, EnergyCo will continue to work with Cessnock City Council on the proposed design of road and intersection upgrades on unclassified roads within the Cessnock local government area.

In addition to this pre-construction road dilapidation surveys and routine inspections will be completed along all nominated construction routes on local roads (mitigation measure TT6). Where rectification works are required due to project impacts, consultation with the appropriate road authority will be undertaken to confirm the scope of the work required.

With respect to the roads specifically identified by Cessnock City Council, Hayes Road (Mf1 Road), Mount View Road, and Pokolbin Mountains Road are proposed as construction access routes and localised widening would be required to accommodate a 19-metre articulated vehicle. Cedar Creek Road has been removed from the nominated construction access route schedule.

Summary of issue

Cessnock City Council requested a detailed analysis and design of required bridge and culvert upgrades and provided information to assist in the assessment.

Specifically, Council requested detailed inspections and a load assessment at two major culverts on Broke Road and the bridge at Mount View Road. It was noted that this be addressed now, rather than deferred as a condition, because no formal load limits are currently in place on these routes. Furthermore, it was noted that Council has previously declined applications on similar roads due to axle load concerns.

Additional information on impacts on local road infrastructure is required as follows:

- a framework for road infrastructure upgrades and ongoing maintenance and monitoring between Council and EnergyCo
- details of road, bridge and culvert upgrades and identification of any significant environmental impacts
- identification of specific infrastructure assets that would be impacted and determination of the extent of investigation, design, and construction work needed.

Response

As identified above, pre-construction road dilapidation surveys and routine inspections will be completed along all nominated construction routes on local roads (mitigation measure TT6). Where rectification works are required due to project impacts, consultation with the appropriate road authority will be undertaken to confirm the scope of the work required.

With respect to the specific roads identified by Cessnock City Council, Broke Road between Wine Country Drive and Hermitage Road is an approved restricted access vehicle (RAV) route (25 metre/26 metre B-double route) whereas Mount View Road, and Broke Road west of Hermitage Road is not an approved RAV route. Mount View Road bridge (Cessnock) would not be subject to loads exceeding bridge capacity. Neither road would be used for oversized overmass (OSOM) movements.

EnergyCo will continue to liaise with Cessnock City Council concerning the construction access routes and will provide the results of the pre-construction dilapidation surveys and assessments once available.

Laydown areas

Summary of issue

Cessnock City Council acknowledged the use of laydown areas for temporary staging, stringing, storage and plant/equipment setup areas and that these areas would be returned to their previous land use at the end of construction. Council also acknowledged the assessment of potential historic impacts at the laydown area at Hayes Road, Millfield in *Chapter 15 (Historic heritage)* of the EIS. Council noted, however, that information on the impacts of other laydown areas was not included in the EIS.

Council requested the following information on the proposed laydown areas:

- confirmation of location of each laydown area
- details of vegetation clearing
- access requirements and any road works
- helipad operations (e.g. Wollombi Forest Road – Central Coast LGA)
- waste management/site facilities

- security arrangements (CCTV/fencing/lighting, etc.)
- rehabilitation to existing land use (revegetation, landscaping, etc.)
- timeframe and/or specific project milestones for removal and rehabilitation.

Response

Laydown areas and access roads

As discussed in *section 4.3.8, Chapter 4 (Project description)* of the EIS, most of the laydown areas would be within the HTP corridor. Since exhibition of the EIS, the construction access routes and access tracks have been amended. This amended list is provided in *section A3.5* and shown in *Figure A10-A14 of Appendix A (Updated project description)* of the Amendment Report).

Laydown areas would be accessed via the construction access routes (public road network) and access tracks (private or public land) identified in *Appendix A (Updated project description)* of the Amendment Report.

Vegetation clearing

The establishment of laydown areas would require vegetation clearing, which has been accounted for in the relevant impact assessments (including biodiversity). Further discussion on vegetation clearing for laydown areas in the Cessnock local government area is provided in *section 7.1.4* of this Submissions Report.

Helipads

Helicopter landing pads (helipads) are proposed to be located at construction support sites located at Hebden Road, Pikes Gully Road, Gouldsville Road and Freemans Drive. In addition, emergency helipads would be provided at laydown areas on Wollombi Forest Road and Flick Road for helicopters to land in the event of an emergency, as discussed in *section 4.3.11, Chapter 4 (Project description)* of the EIS and in *Appendix A (Updated project description)* of the Amendment Report.

Waste management

Various mitigation measures were proposed in the EIS to manage waste during construction of the HTP. These measures were listed in *section 22.3, Table 22.16 in Chapter 22 (Other matters)* (see also *Appendix D (Updated mitigation measures)* of the Amendment Report). These measures apply to the laydown areas and include (among others) the preparation of a waste management and resource recovery plan to manage waste generation, reuse, recycling and disposal during construction of the HTP.

Security

Security arrangements at the laydown areas would be the responsibility of the design and construct contractor(s). If required, security infrastructure may include gates, fencing, lighting and/or cameras.

Decommissioning and rehabilitation

Temporary areas used to support the construction of the project, such as laydown areas, would be decommissioned and rehabilitated, as required, and as noted in *section 4.6* of the EIS (and *section A.6, Appendix A (Updated project description)* of the Amendment Report).

Construction is anticipated to conclude by the end of 2029. The decommissioning and rehabilitation of all temporary areas (such as laydown areas) would occur prior to the conclusion of construction. However, the specific milestones for the decommissioning of an individual laydown area within this timeframe would depend on the appointed construction contractor's detailed construction program and construction staging plan.

Land used for the laydown areas outside of the HTP corridor would be returned to existing land uses upon completion of construction in accordance with the property management plan established with the landowner (as a requirement of mitigation measure LP2). The rehabilitation requirements for temporary areas will be detailed in the property management plans or third-party agreements (in the case of forestry or mining land). These requirements will be informed by precondition assessments of the existing condition of assets, infrastructure, utilities and the general condition of the land.

Construction support sites

Summary of issue

Cessnock City Council acknowledged the use of the Wollombi Road construction support site during construction of the project as outlined in the EIS. Council requested the following additional information regarding the construction support site:

- confirmation the site will not be used for temporary workers accommodation
- confirmation and details of helipad/helicopter use
- details of:
 - all building and structures
 - access requirements and any road works, north and south (building on detail in *Table 4.10* in the EIS)
 - on-site waste management
 - security arrangements (CCTV/fencing/lighting, etc)
 - rehabilitation to existing land use (revegetation, landscaping, etc)
 - timeframe and/or specific project milestones for removal and rehabilitation.

Response

Section 4.3.6, Chapter 4 (Project description) of the EIS described the Wollombi Road construction support site as not providing worker accommodation. However, further consideration of the construction methodology for the project identified the need to reconfigure the Wollombi Road construction support site to include temporary worker accommodation with capacity to house up to 300 construction workers, as described in *section 3.2.4, Chapter 3 (Description of amendments and refinements)* and *Appendix A (Updated project description)* of the Amendment Report. Details about the proposed amendment have been discussed with Cessnock City Council during the preparation of the Amendment Report and this Submissions Report.

The following facilities would be provided at the Wollombi Road construction support site:

- utilities, including telecommunications services, electricity and water (including wastewater treatment plant)
- demountable accommodation and office buildings

- workforce amenities, including food and catering, laundry, bathroom and first aid facilities
- generators
- lighting and security (e.g. fencing and CCTV).

A helipad is not proposed at the Wollombi Road construction support site.

Lighting at construction support sites will be designed and operated in accordance with AS 4282 2019 *Control of the obtrusive effects of outdoor lighting* (mitigation measure LV3).

The EIS has identified the required area for the construction support site and assessed the activities proposed within it. The detailed layout of the construction support site would occur during detailed design by the construction contractor in line with the assessments completed in the EIS and Amendment Report, and any relevant Conditions of Approval.

Further details regarding the Wollombi Road construction support site with worker accommodation is provided in *section 3.2.4* and are shown in *Figure 3-5* of the Amendment Report. Environmental and social impacts associated with the construction support site are also assessed in various sections of the Amendment Report.

An on-site wastewater treatment plant would be provided at the construction support site. It would be a contained system, and may include mechanical screening, biological and chemical treatment, filtration and disinfection. Waste solids produced by the treatment system would be emptied by a licensed contractor and disposed of at a nearby council operated wastewater treatment plant or other appropriately licensed facility. Further information on the wastewater treatment plant is provided in *section A4.4, Appendix A (Updated project description)* of the Amendment Report.

In addition to the information provided in the project description in the EIS (consistent with *Appendix A (Updated project description)* of the Amendment Report), a strategic concept design of the new access and connection to Wollombi Road for the Wollombi Road construction support site (referred to as intersection I-34) is provided in *Appendix D* of *Appendix H (Revised traffic and transport impact assessment)* of the Amendment Report. The detailed design of these works would be confirmed in consultation with Cessnock City Council as the relevant road authority.

Land used for the construction support site would be returned to the existing land use upon completion of construction (see *Appendix D (Updated mitigation measures)* of the Amendment Report).

Main construction is anticipated to commence in 2027 and would conclude by the end of 2029. The establishment of the construction support sites are expected to occur in the early works stage of construction anticipated to be the end of 2026/early 2027 (refer to *A3.12, Appendix A (Updated project description)* of the Amendment Report). However, the specific milestones within the HTP program for the establishment and decommissioning of this construction support site would depend on the appointed construction contractor's detailed construction program and construction staging plan.

7.1.3 Engagement

Future community and stakeholder engagement

Summary of issue

Cessnock City Council encouraged continued regular consultation meetings and workshops with local community groups, Councillors and Council staff. Suggested formalisation of community consultation initiatives be made through the imposition of Conditions of Approval identifying timeframes, participants, themes and expected outcomes of effective community consultation.

Responses

The HTP Community and Engagement team met with Cessnock City Council in October 2025, December 2025 and January 2026 to discuss the issues raised during exhibition and in their submission, and the next steps in the assessment process. The project will continue structured engagement with Cessnock City Council as the project moves toward delivery. EnergyCo will conduct a thorough handover of responsibilities to the network operator and design and construct contractor(s) including relevant information collected during engagement activities to date. Consultation and engagement with the community will be ongoing for the duration of construction and also during operation of the project through an established and ongoing relationship with Cessnock City Council and the network operator.

EnergyCo and Cessnock City Council has entered into a third party agreement which, among other matters, includes engagement terms between both parties, the network operator and the design and construct contractor(s).

7.1.4 Biodiversity

General biodiversity impacts

Summary of issue

Cessnock City Council requested additional information on vegetation clearing at the Wollombi Road construction support site and at laydown areas within their LGA.

Response

The vegetation mapped within the Wollombi Road construction support site and laydown areas within Cessnock City LGA is shown in *Figure 14.8* and *Figure 14.9* of *Appendix E (Revised biodiversity development assessment report)* of the Amendment Report.

The Wollombi Road construction support site maximises use of cleared areas as 93 per cent of the area is already cleared. The site is mostly mapped as non-native vegetation, which comprises Category 1 land as well as patches of vegetation along Wollombi Road and the northern extent of the site that is not classified. Native vegetation that may be cleared at the site is limited to a very small amount of native vegetation that is classified as PCT 3328 Lower Hunter Red-Gum Paperbark Riverflat Forest in the north-west and south-east corner of the site as well as a small amount of PCT3489 Hunter Escarpment Grey Box Forest near the south-west corner of the site.

The reconfiguration of the Wollombi Road construction support site to provide worker accommodation is within the EIS project impact area and would not result in additional impacts to biodiversity compared to the EIS.

Laydown areas within State forests and other laydowns within Cessnock LGA would result in the unavoidable removal of 12.23 hectares of native vegetation.

These impact areas are consistent with *Appendix E (Revised biodiversity development assessment report)* of the Amendment Report and will be offset in accordance with the Biodiversity Offset Scheme via the Strategic Offset Delivery Agreement (SODA).

Table 7-1 of this Submissions Report provides a summary of the areas of vegetation clearing per plant community type (PCT) calculated for the Wollombi Road construction support site as well as for laydown areas within Cessnock LGA.

Table 7-1 Summary of vegetation clearing at the Wollombi Road construction support site and laydown areas within Cessnock LGA

Site and PCT	Area (ha)
Wollombi Road construction support site	17.01
Category 1 Land	11.08
PCT0 – Not classified	4.73
PCT3328 – Lower Hunter Red Gum-Paperbark Riverflat Forest (Mod-good condition)	0.71
PCT3489 – Hunter Escarpment Grey Box Forest (Mod-good condition)	0.50
Laydown areas (total)	12.50
PCT0 – Not classified	0.27
PCT3087 – Lower North Ranges Riparian Turpentine Forest (Mod-good condition)	0.06
PCT3230 – Central Coast Escarpment Moist Forest (Mod-good condition)	0.89
PCT3239 – Hunter Range Sheltered Grey Gum Forest (Mod-good condition)	5.51
PCT3239 – Hunter Range Sheltered Grey Gum Forest (Plantation)	2.56
PCT3241 – Lower North White Mahogany-Spotted Gum Moist Forest (Mod-good condition)	0.03
PCT3242 – Lower North Ranges Turpentine Moist Forest (Mod-good condition)	1.34
PCT3263 – Watagan Range Turpentine-Mahogany Grassy Forest (Mod-good condition)	0.26
PCT3444 – Lower Hunter Spotted Gum-Ironbark Forest (Mod-good condition)	1.58
Grand Total	29.51

7.1.5 Traffic and transport

Traffic impacts – construction and operation

Summary of issue

Cessnock City Council requested additional information on impacts on local road infrastructure as a result of the project during construction and operational. Cessnock City Council also requested that the impacts on sensitive land uses along the route are identified, specifically potential safety risks near schools.

Response

Matters relating to the impacts to local roads as a result of the project is addressed in *section 7.1.2* of this Submissions Report.

The consideration of potential road safety risks along the construction access routes is considered in *section 5.3.8 of Appendix H (Revised traffic and transport impact assessment)* of the Amendment Report. A traffic management plan and traffic control plans will consider road safety, especially around sensitive sites such as schools and will be developed in consultation with the relevant road authorities, Forestry Corporation of NSW (FCNSW), and emergency services. The traffic management plan will also include a driver code of conduct to define acceptable driver behaviour, promoting road safety and minimising the impacts of construction related vehicle movements on local roads and community. This will govern the way that construction workers are required to drive, including adhering to speed limits and the need to watch for pedestrians.

EnergyCo has consulted with Millfield Public School on several occasions to progress discussions on student safety, access, traffic management and broader operational needs. EnergyCo will continue to engage with Millfield Public School, Cessnock City Council and the NSW Department of Education to ensure student safety, accessibility and clear communication remain central considerations in planning and delivery of the HTP. Refer to *Chapter 3 (Engagement)* and *section 6.18, Chapter 6 (Response to organisation submissions)* of this Submissions Report and *Appendix D (Updated mitigation measures)* of the Amendment Report for further information regarding consultation outcomes and associated commitments with regard to Millfield Public School.

Amenity impacts to sensitive land uses due to air or noise emissions from construction vehicles have been assessed in Technical Report 18 – Air quality and greenhouse gas impact assessment, Technical Report 11 – Noise and vibration impact assessment and reassessed in Appendix L (Noise and vibration impact assessment addendum and section 5.17, Chapter 5 (Assessment of impacts) of the Amendment Report, and are anticipated to be minor. Refer to *section 6.16.3, Chapter 6 (Response to organisation submissions)* of this Submissions Report for further details on amenity impacts to Millfield Public School.

During operation of the HTP, traffic and transport impacts would be limited to routine maintenance of the transmission line and switching stations and in response to unforeseen emergency scenarios, as required. The maintenance workforce would typically consist of three to five workers for routine inspections and maintenance, with some less frequent inspections requiring up to 10 personnel. Routine maintenance activities are likely to only require a light vehicle or a 4-wheel drive. Average daily vehicle movements would be less than 10. As such, traffic generation during operation would have negligible impact on the efficiency of the road network in the study area. The low traffic

movements and the ad hoc infrequent use of heavy vehicles for operation and maintenance activities would have a negligible impact on the road condition throughout the local government area.

Environmental management approach

Summary of issue

Cessnock City Council acknowledged the need for pre-construction surveys and routine inspections be completed prior to and during construction for construction routes, and that they will be consulted where rectification works are required.

Council acknowledged that discussions regarding the framework for baseline data gathering (including dilapidation surveys), upgrade works, and methods of communication and agreements on maintenance of assets during and post construction have been held with EnergyCo.

Council's expectation is that EnergyCo pays for local road impacts including baseline data gathering, upgrade works, and maintenance during construction and operation of the project.

Council's expectation is to establish an agreed framework for the upgrade and ongoing use and maintenance of Council assets, and for this to form part of a condition of consent for the HTP.

Response

EnergyCo acknowledges Cessnock City Council's position. EnergyCo and the construction contractors will continue to engage with Cessnock City Council concerning road and intersection upgrades in the local government area, outcomes of pre-condition assessments and routine inspections on local roads and any required action. Copies of pre-condition assessments will be provided to Cessnock City Council.

Costs associated with the road or intersection upgrades and the pre-construction road dilapidation surveys and routine inspections would be the responsibility of EnergyCo and will not be at the cost of Cessnock City Council. Any required rectification works for local roads in the Cessnock local government area during or following construction would be determined in consultation with Cessnock City Council as the relevant road authority at no cost to Cessnock City Council.

Road and intersection upgrades identified by EnergyCo form part of the project and are detailed in *section A3.5, Appendix A (Updated project description)* of the Amendment Report). These upgrades would be confirmed in consultation with the relevant road authority.

As stated in *section 5.5, Chapter 5 (Assessment of impacts)* and *Appendix D (Updated mitigation measures)* of the Amendment Report, a traffic management plan (TMP) would be implemented for the project to identify requirements for minimising traffic impacts during construction (mitigation measure TT1). The TMP would form part of the construction environmental management plan (CEMP) and would be prepared in consultation with Cessnock City Council in addition to other relevant stakeholders.

During the operation of the project, the public road network would be used when required for routine maintenance. Routine maintenance activities would typically only require a light vehicle or sometimes a light truck with a small crew and required equipment. This is unlikely to have a noticeable impact on the road pavement condition, and ongoing obligations for inspections and

maintenance of roads is not warranted. Cessnock City Council will be responsible for ongoing maintenance for any permanent road or intersection upgrades.

7.1.6 Social

Community benefits scheme

Summary of issue

Cessnock City Council noted that the *National Guidelines: Community Engagement and Benefits for Electricity Transmission Projects* (July 2024) calls for the development of community benefit programs that reflect and respond to the specific impacts of major infrastructure projects, including cumulative impacts on local communities and infrastructure. In this context, Council states that the levying of infrastructure contributions is not only appropriate but necessary, given the scale and likely impacts of the proposed development.

Cessnock City Council noted that the primary access routes of Cessnock Road, Wollombi Road, Wine Country Drive, and Broke Road comprise a combination of regional, State, and local roads and that substantial government investment has already been committed to these routes.

To address the accelerated wear on local roads caused by heavy vehicles associated with the construction phase of the development, Council recommended the application of a haulage levy, ensuring the project contributes fairly to the cost of maintaining and rehabilitating roads under Council's care and control, rather than shifting that burden to ratepayers. Cessnock City Council requested information on heavy vehicle movements to inform this levy in line with the *Cessnock City Wide Infrastructure Contributions Plan 2020* (Cessnock City Council 2020).

Response

EnergyCo recognises Cessnock City Council's concerns regarding the need to address the distribution of impacts and benefits on the project, including in relation to increased heavy vehicle movement on construction access routes within the Cessnock LGA.

The distribution of community impacts and the potential benefits from the project are discussed in *section 6.3.2* (enhanced community services through community benefit investments) and *section 6.3.3* (perceived unequal distribution of project benefits creating community strain) of *Technical Report 6 – Social impact assessment* of the EIS. As recognised in the assessment, EnergyCo is expecting to commence consultation with relevant communities in 2026 to inform the design and delivery of the community and employment benefit program in the Hunter-Central Coast region, which may assist in sharing of benefits with local communities hosting network infrastructure.

Construction access routes and the indicative maximum daily traffic movements generated by construction are detailed in *section 5.5, Chapter 5 (Assessment of impacts)* and *Appendix H (Revised traffic and transport impact assessment)* of the Amendment Report. Heavy and light vehicle traffic generated by the project would be distributed across the construction access routes. For local roads, the project would upgrade sections of five local roads in the Cessnock LGA to accommodate construction traffic (refer to *Appendix A, section A3.5 (Updated project description)* of the Amendment Report), which represents an opportunity for the project to deliver a meaningful, long-

term improvement to infrastructure. Regional roads, such as Wollombi Road and Broke Road, have been built to accommodate medium to high volumes of traffic. The increase in vehicles due to construction traffic would have a negligible to minor impact on pavement condition.

While application of a haulage levy is not proposed, *Appendix H (Revised traffic and transport impact assessment)* of the Amendment Report outlines mitigation measures to address concerns relating to impacts on roads including a requirement for pre-construction road dilapidation surveys and routine inspections (mitigation measure TT6). The surveys will assess the current condition of the road surface and will be documented in a road condition report, with a copy being provided to the relevant road authority. Routine inspections will be undertaken during and following construction to assess the damage to local roads accessed by project-related traffic. Damage caused by the project on local roads in Cessnock City Council will be rectified or compensated for during or after construction in consultation with the Cessnock City Council as the relevant road authority.

As stated in *section 5.5, Chapter 5 (Assessment of impacts)* and *Appendix H (Revised traffic and transport impact assessment)* of the Amendment Report, a traffic management plan will be implemented for the project, to identify requirements for minimising traffic impacts during construction (mitigation measure TT1). The traffic management plan will be prepared in consultation with Cessnock City Council, other relevant road authorities, FCNSW, affected property owners, and emergency services to identify key management and response strategies to minimise potential delays and disruptions that may arise due to the project. EnergyCo and the construction contractors will continue to engage with Cessnock City Council to determine the specific road use and rectification requirements.

Community benefits funding allocation

Summary of issue

Cessnock City Council requested a community benefit contribution and requested confirmation that EnergyCo will apply the *National Guidelines: Community Engagement and Benefits for Electricity Transmission Projects* (DCCEEW 2024) to the community benefit sharing scheme for the HTP.

Council supported commitments within *Technical Report 19 – Economic impact assessment* of the EIS. These included the implementation of a benefits scheme and local workforce participation strategy, including increasing income and employment opportunities for local Aboriginal groups under the *First Nations Guidelines for the NSW Electricity Infrastructure Roadmap* (DCCEEW 2025). However, Council noted that commitments from EnergyCo for \$50 million for local council strategic initiatives and other benefit sharing initiatives is less than EnergyCo's requirements to meet its community benefit sharing obligations for the HTP.

Council requested the following:

- EnergyCo to increase this amount proportionate with the impacts in their LGA and in consultation with Cessnock City Council
- that DPHI levy appropriate infrastructure contributions, in line with both legislative intent and national guidelines
- confirmation that future consultation on community benefit sharing is not limited to line items and baseline figures presented in the EIS.

Response

Reference to \$50 million for local council strategic initiatives and other benefit sharing initiatives was provided in error in *Technical Report 19 – Economic impact assessment* of the EIS as the amount has not yet been determined.

EnergyCo is expecting to commence consultation with relevant communities in 2026 to inform the design and delivery of the community and employment benefit program in the Hunter-Central Coast region that will ensure benefits are shared with the local communities hosting the renewable energy transition, including those hosting the HTP.

The community and employment benefit program will be developed in accordance with the *Regional Communities Consultation Guide* (NSW Premiers Department 2025) and the *Grants Administration Guide* (NSW Cabinet Office 2024) with consideration given to the *National Guidelines: Community Engagement and Benefits for Electricity Transmission Projects* (DCCEEW 2024).

EnergyCo will work closely with Cessnock City Council to shape the community and employment benefit program.

7.1.7 Flooding

General flooding impacts

Summary of issue

Cessnock City Council noted that there was limited information on the Wollombi Road construction support site being flood prone in the EIS. Council requested additional information on site-specific flood impacts and management for the site.

Response

The flood affectation for the Wollombi Road construction support site is described in *Table 5.1 of Technical Report 12 – Flooding impact assessment* of the EIS, which notes that flooding during a 10 per cent annual exceedance probability (AEP) event is confined to the asset protection zone in the northern portion of the construction support site. During a one per cent AEP event, flooding may extend up to 80 metres beyond the asset protection zone. Flooding during a one per cent AEP event, may extend into the western portion of the site over a width of 150 metres and to a maximum depth of 0.5 metres.

Construction support site infrastructure, including any buildings, will be designed to avoid the flood prone areas.

The Amendment Report assessed the flooding impacts of the Wollombi Road construction support site reconfiguration. The addition of temporary worker accommodation would increase flood risk during construction as worker accommodation located on a floodplain has an added risk to workers should a flood occur overnight. To manage this risk, the temporary buildings for worker accommodation will be located a minimum 0.5 metres above the peak one percent AEP flood level, which is consistent with the Flood Planning Levels (FPLs) set out in Cessnock City Council's Development Control Plans (refer to *Appendix L (Flooding impact assessment addendum)* of the Amendment Report).

Measures to manage the risk of flooding to the Wollombi Road construction support site/temporary worker accommodation, including flood emergency response procedures are provided *Appendix D (Updated mitigation measures)* of the Amendment Report.

7.1.8 Bushfire

Bushfire risks – construction

Summary of issue

Cessnock City Council noted that there was limited information on the Wollombi Road construction support site being bushfire prone in the EIS. Council requested additional information on site-specific bushfire management and evacuation for the site.

Response

Bushfire risk for construction support sites, including the Wollombi Road site, was assessed in *Chapter 21 (Hazards and risk)* of the EIS, with further detail provided in *Technical Report 14 – Bushfire Risk Assessment*. Further details about bushfire management near Wollombi Road construction support site have been provided as part *section 5.15, Chapter 5 (Assessment of impacts)* of the Amendment Report.

The bushfire risk assessment concluded that while the Wollombi Road construction support site is situated within a bushfire-prone landscape, construction activities on the site can be managed effectively through implementation of the project-wide mitigation framework and site-specific controls. An asset protection zone (APZ) of approximately 36 metres for project office locations where the dominant surrounding vegetation is grassland was identified for this construction support site in the EIS. Mitigation measure BF5 requires the establishment of an APZ at each construction support site in accordance with the assessment, as well as the *Planning for Bush Fire Protection 2019* and NSW Rural Fire Service (RFS) standards for APZs.

The bushfire risk assessment was updated as part of the Amendment Report to account for the inclusion of temporary workforce accommodation at the Wollombi Road construction support site (refer to *section 5.15* and *Appendix M (Bushfire risk assessment addendum)* of the Amendment Report. This has identified the need to provide an APZ of approximately 67 metres for the workforce accommodation facility to ensure compliance with *Planning for Bush Fire Protection 2019*. The APZ will be confirmed through detailed design when final internal layout plans for the construction support site is determined.

Accordingly, an APZ of approximately 67 metres would apply to temporary worker accommodation, while an APZ of approximately 37 metres (as identified in the EIS) would apply to other construction support infrastructure at the site. The APZ would be accommodated within the construction impact area identified in the EIS and Amendment Report.

Bushfire emergency management and evacuation for the Wollombi Road construction support site will be addressed through the bushfire emergency management and evacuation plan (BEMEP) required under mitigation measure BF1 (see *Appendix D (Updated mitigation measures)* of the Amendment Report). The BEMEP will apply to both the construction support site and the temporary

worker accommodation facilities. The BEMEP will be finalised prior to operation of the construction support site.

7.1.9 Other matters

Support for project

Summary of issue

Cessnock City Council expressed support for the HTP's role in ensuring NSW's energy security and acknowledged that some local disruption is unavoidable. Council identified three key areas requiring further information and collaboration with EnergyCo and the NSW Department of Planning, Housing and Infrastructure (DPHI) – the Public Benefit Sharing framework, local road infrastructure, construction support sites and laydown areas – to better understand and mitigate local impacts.

Response

EnergyCo acknowledges Cessnock City Council's support for the HTP and its recognition of the project's broader importance for NSW's energy security. Cessnock City Council's request for further information regarding the Public Benefit Sharing framework, local road infrastructure, construction support sites and laydown areas have been addressed in *sections 7.1.2 and 7.1.5* of this Submissions Report. EnergyCo appreciates Council's identification of key local matters and will continue to engage with Council to provide further information, clarify project impacts and work collaboratively to minimise and manage concerns.

7.2 Lake Macquarie City Council

7.2.1 Project description (construction)

Construction access routes

Summary of issue

Lake Macquarie City Council detailed concerns and requirements regarding the traffic and transport impacts of the project, focusing on road and intersection safety and upgrades. General concerns included:

- intersection of Mandalong Road, Freemans Drive, and Wyee Road that is already identified for an upgrade by Transport for NSW (TfNSW): Council recommended EnergyCo consult with TfNSW on the design and timing of this upgrade
- built-up areas: several proposed construction routes pass through built-up suburban areas within Lake Macquarie City Council local government area. Council noted that safety measures must be a key consideration

Council listed several intersections along potential construction routes where further information, safety measures, and/or design treatment are required. Key issues noted include:

- Alton Road / Freemans Drive: High risk due to nearby pedestrian and cyclist activity (shops, schools, etc.), concerns about the narrow cycle lane

- Martinsville / Pringles Road and Martinsville / Watagan Road: Concerns about insufficient information on treatment, swept paths, and failure to achieve Safe Intersection Sight Distance (SISD) westbound
- Martinsville / Watagan Road: Requires upgrades to lane width and shoulders to accommodate heavy vehicles, including painted median treatments to guide light vehicle speeds. SISD is not achieved westbound
- Watagan Forest Road / Martinsville Hill Road: SISD information was not provided
- Freemans Drive / Mount Faulk Road: Further information is required to demonstrate if a priority control at the intersection is required
- Freemans Drive / Mount Nelinda Road: Further information is required to demonstrate if a priority control at the intersection is required. A swept path analysis is required to demonstrate left out movement onto Freemans Drive
- Freemans Drive / construction support site: Needs justification for why left-in, left-out, and right-out treatments are not required, given the 90 kilometres per hour speed limit on Freemans Drive.

Response

Construction access routes, being the public road network that is used to travel to/from the construction impact area, and OSOM access routes, were identified in the EIS. The construction access routes have been refined and presented in the revised project description in *Appendix A (Updated project description)* of the Amendment Report and assessed in *Appendix H (Revised traffic and transport impact assessment)* of the Amendment Report. In addition to these refinements, clarifications on the scope and location of local road and intersection upgrades have been provided in the revised project description (*section A3.5, Appendix A (Updated project description)* of the Amendment Report) and *Appendix H (Revised traffic and transport impact assessment)* of the Amendment Report.

Appendix H (Revised traffic and transport impact assessment) of the Amendment Report identifies that the level of service (LOS) at the Mandalong Road, Freemans Drive, and Wyee Road in its current configuration (roundabout) is forecast to operate in 2028 at a LOS of F with and without the project in the AM and PM network peak. This would improve to a LOS C when upgraded to a signalised intersection as proposed by TfNSW. This intersection is important in providing access to and from the construction impact area, particularly the Eraring substation and transmission line corridor. However, to minimise pressure on this intersection, alternative access routes to/from the Freemans Drive construction support site have been included for construction traffic that can avoid this intersection (being traffic travelling to/from the construction impact areas west of the M1 Motorway). EnergyCo will consult with TfNSW concerning the timing for these works during construction planning and preparation of the traffic management plan (mitigation measure TT1).

Alton Road and Pringles Road would be used by low volumes of construction vehicles to access the existing transmission line to strengthen towers and restring the existing transmission line. These works would fall outside of the peak project traffic generation phase and require much lower traffic volumes (in the order of 10 light vehicles and five heavy vehicles in the peak hours). The swept path analysis (for non-signalised intersections) has not identified the need for any road upgrades at the Alton Road / Freemans Drive or Martinsville Road / Pringles Road intersections to accommodate construction vehicles. Martinsville Road / Pringles Road intersection has existing SISD non-

compliance based on the desktop assessment, and any required controls during construction would be identified during detailed design.

The strategic concept design for the Martinsville Road / Watagan Road intersection, Freemans Drive / Mount Faulk Road and Freemans Drive / Mount Nelinda Road is provided in *Appendix H (Revised traffic and transport impact assessment)* of the Amendment Report. As identified in the EIS, these intersections will need to be upgraded as a result of the turn warrant assessments and/or swept path analysis. The detailed design for these intersections will be progressed further with Lake Macquarie City Council as the relevant road authority, noting that the required controls to address SISD requirements would be identified during detailed design and may include a temporary speed reduction along Martinsville Road on approach to the intersection to comply with SISD requirements. Additional widening has also been identified for the Freemans Drive / Mount Nelinda Road in response to an updated swept path analysis (provided in *Appendix H (Revised traffic and transport impact assessment)* of the Amendment Report).

Martinsville Hill Road and Watagan Forest Road are forestry roads that service the Watagan and Olney State forests. Sections of these roads would be widened to accommodate movement for 19 metre articulated vehicle and OSOM movements, and traffic controls would also be required. The design of these works and traffic control will be progressed with FCNSW.

A new access road to Freemans Drive construction support site would be designed to comply with turn warrant treatments during construction (being a basic left / channelised right turn intersection). The number of vehicles on Freemans Drive during the network peak hour is relatively low (138 vehicles in the 2028 AM peak hour) and there would be sufficient gaps for vehicles to exit the construction support site without causing excessive slowing of traffic on Freemans Drive, and therefore, provision of additional lanes is not required. The required controls during construction to address SISD requirements would be identified during detailed design and may include a reduced temporary speed limit along Freemans Drive on approach to the construction support site. As noted above, the detailed design for this access will be progressed further with Lake Macquarie City Council as the relevant road authority.

Construction access routes – safety

Summary of issue

Council recommended undertaking:

- a detailed intersection safety assessment of all identified intersections and road upgrades using a Safe System Assessment
- a road safety audit report for the proposed construction access routes.

Response

During construction, the interaction that the project traffic has with the road network would typically be at construction access points, road and intersection upgrades and on the assigned construction access routes between the construction support sites and work areas. The mitigation measures detailed in *Appendix D (Updated mitigation measures)* of the Amendment Report) consider the principles of the Safe System Approach that would provide a safe road environment during construction of the project.

Construction access routes – Conditions of Approval

Summary of issue

Lake Macquarie City Council recommended the following Conditions of Approval be imposed requiring:

- road upgrades must be designed to cater for all heavy vehicles used for construction and operation of the project and include provisions for pedestrians, cyclists, and public transport
- permanent parking areas must comply with Australian Standard (AS) 2890
- formal applications must be made for:
 - a Public Works Certificate (section 138 of the *NSW Roads Act 1993*) where Council is the road authority
 - approval to use the planned haulage routes in the LGA
 - approval of traffic management plans where Council is the road authority.

Response

Impacts to public transport and active transport is discussed in *Appendix H (Revised traffic and transport impact assessment)* of the Amendment Report. Intersection upgrades identified by EnergyCo that interact with existing or planned pedestrian, cyclist or public transport infrastructure would be designed to reinstate existing infrastructure or not preclude future infrastructure (or as agreed with Lake Macquarie City Council).

A traffic management plan will be implemented for the project to identify requirements for minimising traffic impacts during construction (mitigation measure TT1). The traffic management plan will be prepared in consultation with Lake Macquarie City Council and other relevant road authorities. The traffic management plan will include confirmation of construction access routes within the LGA, driver safety considerations (including protocols when travelling through area of high pedestrian or cyclist activity) and site-specific traffic control measures.

For the limited OSOM movements associated with the project, use of roads within the Lake Macquarie LGA will be required. For these movements, permits will be obtained from the National Heavy Vehicle Regulator prior to the OSOM movement. *Appendix H (Revised traffic and transport impact assessment)* of the Amendment Report lists the local roads within the LGA that would be used by OSOM vehicles associated with the project.

No permanent car parking areas are proposed within the Lake Macquarie LGA, however, onsite parking would be provided within the Freemans Drive construction support site.

Road upgrades in the Lake Macquarie LGA are proposed to enable OSOM movements to the Olney Switching Station. Intersection upgrades are identified as a result of the turn warrant or swept path analysis for construction vehicles.

With respect to the Roads Act, approvals under section 138 of the Roads Act are only required where works are proposed on classified roads or Crown roads by virtue of section 5 of Schedule 2 of the Roads Act. Irrespective, EnergyCo will continue to work with Lake Macquarie City Council on the proposed design of road and intersection upgrades on unclassified roads.

In addition to this, pre-construction road dilapidation surveys and routine inspections will be completed along all nominated construction access routes on local roads (refer to *Appendix D*

(Updated mitigation measures) of the Amendment Report)). Where rectification works are required due to project impacts, consultation with the appropriate road authority will be undertaken to confirm the scope of the work required.

Construction access routes – Martinsville Road / Freemans Drive active transport project

Summary of issue

Lake Macquarie City Council stated that it currently holds a Federal Active Transport grant for safety improvements at the Martinsville Road/Freemans Drive intersection, with works required by 2028–29. Council noted that the proposed timing of the project would impact Council's ability to complete these works, forcing the Council to submit a grant variation and potentially relinquish funding. Council recommends that EnergyCo be accountable for designing and delivering the required upgrade works as part of the HTP.

Council noted the key design considerations for the intersection. These included:

- completion of the link between Martinsville Road and Cooranbong Park is expected to significantly increase the number of pedestrians and cyclists at the intersection
- Cooranbong Public School is nearby, contributing to high pedestrian activity during peak drop-off/pick-up times
- traffic modelling shows the intersection will operate at level of service (LOS) D during the PM peak under future conditions, indicating growing congestion and delays.

Council stated that to address the above issues, the design needs to include widening, turning lane treatments, or signalisation to improve traffic flow and the safety of vulnerable road users.

Council recommended that EnergyCo take responsibility for designing and constructing the upgraded Martinsville Road/Freemans Drive intersection to:

- accommodate the heavy vehicle movements of the project
- incorporate the Council's requirements for safe and accessible pedestrian and cycling crossings
- ensure seamless integration with the Council's planned shared paths on either side of the intersection.

Response

EnergyCo has and will continue to engage with Lake Macquarie City Council on the identified upgrades at the Freemans Drive / Martinsville Road intersection. EnergyCo has presented to Lake Macquarie City Council on how the interface with the HTP project requirements and the safety improvements at the Martinsville Road / Freemans Drive intersection would be managed, and will continue to coordinate with Lake Macquarie City Council on how these works would be staged and managed to not preclude the ultimate delivery of Lake Macquarie City Council's Martinsville Road / Freemans Drive intersection upgrade. Appendix D of *Appendix H (Revised traffic and transport impact assessment)* of the Amendment Report provides the upgrades that would be delivered as part of HTP, and how these would be staged.

EnergyCo notes Lake Macquarie City Council's recommended design considerations for the intersection. While EnergyCo will not undertake the full scope of the proposed upgrades planned by Lake Macquarie City Council, the proposed upgrades as part of the HTP would include localised widening for turning vehicles and an auxiliary left turn and channelised right turn. As presented to

Lake Macquarie City Council, the design of the intersection would include a tie into the future cycle lane at the completion of construction to future proof Council's delivery of the ultimate design. These proposed upgrades have been determined based on intersection performance and operation, turning capacity, and safe intersection sight distances (refer to *Appendix H (Revised traffic and transport impact assessment)* of the Amendment Report) which would cater safely for the proposed construction traffic volumes, including delivery of oversized equipment or construction material, and ensure public road safety.

Construction access routes – Martinsville Road / Watagan Road intersection

Summary of issue

Lake Macquarie City Council requested to reinstate a narrower intersection at Martinsville Road/Watagan Road to reduce Council's long-term asset management burden and enhance safety for road users.

Response

EnergyCo commits to reverting the intersection at Martinsville Road/Watagan Road in accordance with Lake Macquarie City Council's request.

Resource use and materials

Summary of issue

Lake Macquarie City Council noted that the project would involve extensive earthworks, and that limited detail is available regarding the extent and amount of earthworks required. Council recommended that the project be designed to balance the level of earthworks (deficit/surplus), where possible.

Response

EnergyCo acknowledge the recommendation regarding balancing earthwork volumes. EnergyCo has endeavoured to balance cut and fill volumes as much as possible in key areas of the design such as switching station pads, tower pads, road works, laydown areas and construction support sites. This would be further refined during the project's detailed design. A volumetric analysis would be undertaken to define the projects total anticipated material deficit (material that needs to be imported) and material surplus (material that needs to be disposed of) during detailed design.

7.2.2 Biodiversity

Impacts to terrestrial biodiversity

Summary of issue

Lake Macquarie City Council expressed concern regarding the biodiversity impacts of the construction support site at Freemans Drive.

Council identified the following assessment gaps and potential impacts:

- the proposed footprint largely avoids remnant native vegetation but is likely to directly impact some freshwater wetland vegetation near a small dam

- the site appears not to accommodate a buffer to remnant native vegetation
- there is a discrepancy between the provided Category 1 exempt land map and the online native vegetation regulatory map, which needs review as it may affect biodiversity offsets.

Council recommended the following additional assessment:

- review of Category 1 exempt land map
- undertake a detailed assessment of the construction support site (including consideration of threatened species and important habitat) and include in the biodiversity development assessment report (BDAR)
- establish buffers, particularly along the northeastern boundary, to protect the endangered ecological community vegetation. Important habitat features (like nest/den trees) must be mapped, and suitable buffers proposed (including features found outside of the site footprint, as required habitat feature buffers may need to be accommodated within the footprint).

Council also recommended the following Conditions of Approval be imposed:

- submission of site-specific plans for the construction support site, including:
 - stormwater management plan
 - erosion and sediment control plans
 - weed control plan
 - biosecurity control plans
- preparation of a post-closure rehabilitation plan, including rehabilitation targets and timeframes, and addressing any impacts that occur outside the site footprint during operation.

Response

The online native vegetation regulatory map was developed by Conservation Programs, Heritage and Regulation (CPHR), however it is currently still being drafted. In the absence of this, areas of Category 1 – exempt land have been identified through a combination of desktop modelling and field survey, and through consultation with CPHR as described in *section 4.1.3 of Appendix E (Revised biodiversity development assessment report)* of the Amendment Report.

The Freemans Drive construction support site maximises use of existing cleared areas, as 97 per cent of the area is already cleared. As shown in *Figure 14.12 Page 24 of Appendix E (Revised biodiversity development assessment report)* of the Amendment Report, the Freemans Drive construction support site has generally been mapped as non-native vegetation comprising Category 1 land with a small area of vegetation mapped as ‘Miscellaneous Ecosystems’ along the southern border of the site.

Section 4.1.2 of Appendix E (Revised biodiversity development assessment report) of the Amendment Report explains that mapping of ‘Miscellaneous Ecosystems’ includes non-native vegetation surrounding dams. No threatened species or important habitat were identified within the Freemans Drive construction support site during field surveys. The final determination for Freshwater Wetland excludes human made dams and structures under paragraph four that states: ‘Artificial wetlands created on previously dry land specifically for purposes such as sewerage treatment, stormwater management and farm production, are not regarded as part of this community.’ As such, no Freshwater Wetland occurs within the Freemans Drive construction support site.

Table 7-2 of this Submissions Report provides a summary of the areas of impact per vegetation type for the Freemans Drive construction support site within the Lake Macquarie LGA.

Table 7-2 Summary of vegetation clearance within the Freemans Drive construction support site

Vegetation type	Area (ha)
Category 1 Land	16.65
PCT0 – Not classified	4.11
PCT3583 – Hunter Coast Lowland Scribbly Gum Forest (Derived condition)	0.31
PCT3583 – Hunter Coast Lowland Scribbly Gum Forest (Mod-good condition)	0.42
Grand Total	21.49

This small impact area will be offset in accordance with the NSW Biodiversity Assessment Method 2020 (BAM) via the SODA.

Any potential impacts on biodiversity (including indirect impacts) will be managed through preparation and implementation of a biodiversity management plan (BMP) for the project. As outlined in *Appendix D (Updated mitigation measures)* of the Amendment Report, the BMP will be prepared by a suitably qualified and experienced biodiversity expert and will include (as a minimum):

- the location and extent of areas of vegetation clearance and habitat disturbance, and how these will be suitably demarcated on-site
- the location and extent of areas to be protected (e.g. retained vegetation, hollow-bearing trees, nests, burrows and other habitat features, including applicable buffers to habitat features) located inside the construction impact area or in close proximity to clearing areas
- focus on retained vegetation protection, including plant types to be retained in disturbance areas B and HZ
- pre-clearing survey procedures
- two-phase clearing process to allow fauna to move into adjoining habitat
- a threatened species unexpected finds protocol
- revegetation/rehabilitation plan (including seed collection where appropriate)
- monitoring of partial clearance
- fauna handling and rescue procedure
- measures to be implemented on-site to clearly demarcate areas to be retained as 'no go areas'
- procedures for monitoring of partial clearance
- salvage of resources
- revegetation/rehabilitation plan (including seed collection where appropriate)
- controlling erosion (unless separate ERSER)
- bushfire management
- education of construction teams
- adaptive management procedures (including triggers)
- monitoring, evaluation reporting and compliance.

The Freemans Drive construction support site would also be considered and included in other construction management plans for the project where relevant including (refer to *Appendix D (Updated mitigation measures)* of the Amendment Report):

- the stormwater management plan and erosion and sediment control plans (ESCPs) that would be prepared as a sub-plan to the project specific soil and water management plan (refer to *section 17.5.1, Chapter 17 (Surface water)* of the EIS and mitigation measures SW1 and SW3)
- the biosecurity management plan that would be prepared and include weed management controls as outlined in mitigation measure AG3
- the rehabilitation management plan as outlined in mitigation measure SL3.

General biodiversity impacts

Summary of issue

Lake Macquarie Council asserted that the extent of biodiversity impacts of the project (habitat fragmentation and clearing of native vegetation) would influence the achievement of Council's strategic biodiversity objectives as outlined in the *Lake Macquarie Conservation Planning Framework* and *Lake Macquarie City Local Strategic Planning Statement* (Lake Macquarie City Council 2019). Council stated that the framework objectives and desired native vegetation retention target has not been considered or referred to in the EIS.

Council asserted that the biodiversity assessment incorrectly combined avoidance and minimisation of impacts, noting that avoidance must be fully demonstrated before minimisation and offsets are applied per the NSW *Biodiversity Conservation Act 2016* (BC Act). Council stated that avoidance principles may not have been correctly applied in selecting the preferred corridor for the HTP.

Council identified survey and impact assessment limitations. These included:

- survey focus: the BAM was used, which Council argued is primarily focused on determining offset credits rather than identifying species presence and assessing landscape-scale impacts like habitat fragmentation
- insufficient species information: Council stated that there is insufficient information to determine the impact on several key species known to occur in the area, including the rare orchid *Genoplesium insigne*, the Koala, and large forest owls like the Sooty Owl. Other potentially impacted species include Greater and Yellow-bellied Gliders and several amphibians (e.g. Littlejohn's Tree Frog)
- limited scope: Council stated that the assessment focused on listed threatened species and failed to consider the impacts on ecosystem function in intact natural areas. Species and habitat loss were not considered in the context of systematic regional and national decline in the population and viability of many species. Council stated that the consideration of likely environmental impacts on the natural and built environments is required under the NSW *Environmental Planning and Assessment Act 1979*.

Council also noted that a draft biodiversity management plan should have been submitted and exhibited as part of the EIS to allow the scope of mitigation measures to be properly assessed.

Response

The BAM is required to be followed to inform preparation of a BDAR as a requirement set by the NSW Planning Secretary's environmental assessment requirements (SEARs). While Lake Macquarie City Council's specific strategic objectives and targets were not mentioned in *Technical Report 1 – Biodiversity development assessment report* or the EIS, the project has focused on avoiding and minimising biodiversity impacts wherever possible through project development.

Chapter 7 of *Technical Report 1 – Biodiversity development assessment report* of the EIS and Appendix E (*Revised biodiversity development assessment report*) of the Amendment Report explains the process followed to avoid and minimise impacts in accordance with section 7 of the BAM, which is required by the BC Act. As described in section 7.2.3 of Appendix E (*Revised biodiversity development assessment report*) of the Amendment Report a tiered approach to defining the preferred project corridor was carried out where avoidance was demonstrated before minimisation and offsets were considered and applied. In accordance with this approach, avoidance of Tier 1 constraints, which are areas with significant biodiversity values (national parks, nature reserves, protected areas, existing offset areas, wetlands and high conservation woodland remnants and scarce valley floor vegetation) was initially prioritised before avoiding Tier 2 biodiversity constraints where possible then minimising impacts on Tier 3 biodiversity constraints. The BAM provides the number and class of biodiversity credits that need to be offset to achieve 'no net loss' of biodiversity, but only after attempts to avoid, minimise and mitigate impacts have been considered and addressed.

The BAM provides a consistent method to assess impacts on biodiversity values from a proposed development (including major projects), activity, clearing or biodiversity certification as well as improvements in biodiversity values from management actions undertaken at a stewardship site. The BAM includes considerations such as how to determine species presence and assessment requirements for habitat fragmentation. Sections 2.3 and 2.4 of Appendix E (*Revised biodiversity development assessment report*) of the Amendment Report outlines the comprehensive methods carried out to determine species presence for the project, including substantial targeted surveys. Section 8.3.4 of Appendix E (*Revised biodiversity development assessment report*) of the Amendment Report provides an assessment of landscape-scale impacts including habitat fragmentation related to overall habitat connectivity.

Technical Report 1 – Biodiversity development assessment report and Appendix E (*Revised biodiversity development assessment report*) of the Amendment Report were informed by data from several sources to determine the impact on key species known to occur in the area including those listed by Lake Macquarie City Council, which included (but not limited to):

- consideration of a reference population of *Genoplesium insigne* within a nearby transmission easement, BioNet flowering records and carrying out targeted surveys for the species which resulted in a recording that was verified by the National Herbarium of NSW as outlined in Appendix F of *Technical Report 1 – Biodiversity development assessment report*
- koala spot assessments, spotlighting and thermal drone surveys as per the methodology provided in Appendix O of *Technical Report 1 – Biodiversity development assessment report* that was in accordance with the *Koala (Phascolarctos cinereus): Biodiversity Assessment Method Survey Guide* (DPE, 2022)
- spotlighting and call playback for large forest owls including Sooty Owl

- spotlighting, stag watches, use of remote cameras and thermal drone survey for Greater Glider and/or Yellow-bellied Gliders
- aural-visual surveys and tadpole searches for amphibians including Littlejohn's Tree Frog.

While the BAM focuses on threatened species and ecological communities, *Technical Report 1 – Biodiversity development assessment report* and *Appendix E (Revised biodiversity development assessment report)* of the Amendment Report has assessed impacts on intact natural areas and ecosystem functions through assessing impacts on plant community types, including those that do not align with a threatened ecological community, habitat connectivity and other impacts such as vehicle strike risk.

Population viability has been assessed where relevant for threatened ecological communities or species at risk of a serious and irreversible impact (refer to *Chapter 9 of Technical Report 1 – Biodiversity development assessment report* of the EIS and *Appendix E (Revised biodiversity development assessment report)* of the Amendment Report).

The scope of the mitigation measures proposed to manage biodiversity were exhibited as part of the EIS as they were included in the EIS biodiversity chapter and *Technical Report 1 – Biodiversity development assessment report*. Some mitigation measures were revised or added as part of *Appendix E (Revised biodiversity development assessment report)* of the Amendment Report. A BMP is required to be prepared by the construction contractors based on the final mitigation measures for the project, which have been revised as per this Submissions Report and the Amendment Report (refer to *Appendix D (Updated mitigation measures)* of the Amendment Report), as well as any future conditions of the approval for the project. The BMP will be prepared in accordance with the *Appendix E (Revised biodiversity development assessment report)* of the Amendment Report and will act as the overarching document guiding the implementation of biodiversity mitigation and management measures proposed.

Biodiversity offsets

Summary of issue

Lake Macquarie City Council expressed concern regarding the lack of certainty and the proposed method for biodiversity offsets and delivery for the HTP.

Council noted that the project documentation provides no certainty on how biodiversity offsets would be achieved, as this has been deferred to a later stage and a separate authority (the NSW Department of Climate Change, Energy, the Environment and Water (NSW DCCEEW)). Council noted that EnergyCo intends to use a SODA, transferring the responsibility for delivering biodiversity offsets and the commensurate funding to NSW DCCEEW.

Council stated that a generic Hunter Region Conservation Investment Strategy (CIS), similar to one used in the Central-West Orana, is insufficient due to regional differences, priorities, and land use conflicts in the Hunter. Council recommended that conservation investment in the Hunter Region should prioritise acquiring and consolidating existing conservation reserves in public ownership, rather than relying on establishing private stewardship sites.

Council stated that it supports offsetting, but states that the scope of the SODA should be outlined in the EIS and that the CIS must be consistent with local government conservation priorities in the Lake Macquarie LGA.

Council recommended the following

- SODA and CIS:
 - the scope of the SODA must be outlined and included in the EIS for consideration, in consultation with Council
 - both the SODA and the regional CIS must be finalised and fully funded before the project is approved to guarantee that biodiversity outcomes can be delivered
 - the regional CIS must be in place prior to approval and be subject to Council and community consultation
- impact quantification:
 - the extent of vegetation clearing within the Lake Macquarie LGA should be quantified
 - the loss of habitat connectivity and significant habitat resulting from road widening should be assessed
- further assessment is required for indirect impacts and the management of ongoing long-term impacts of the project on the environment.

Response

EnergyCo will enter into a SODA with NSW DCCEE who will hold the responsibility for delivering biodiversity offsets for the project in accordance with the CIS, published September 2025. The details of the SODA for the project will be provided on the NSW DCCEE website, once finalised.

As per clause 6.3A(1) of the Biodiversity Conservation Regulation 2017 'A strategic offset delivery agreement (a SODA) with the Environment Agency Head may be entered into by the applicant or proponent of major project development after the development consent for, or approval of, the development is given.' As such, assessment of the project cannot be paused until a SODA is developed, as a SODA is required to be developed following project approval.

Section 2.3 of the Hunter Conservation Investment Strategy states 'Consolidating protected areas' as one of the conservation priorities and Section 3.1 acknowledges the NSW National Parks and Wildlife Service (NPWS) reserve acquisition program that could prioritise properties for acquisition by NPWS, which aligns with Lake Macquarie City Council's recommendations.

A SODA must specify the number and class of biodiversity credits that would, at the time of entering the SODA, otherwise have been required under the relevant planning approval for the major project development, including under an instrument or agreement required to be made or entered into under the consent or approval in relation to that requirement (the required number and class of biodiversity credits). *Appendix E (Revised biodiversity development assessment report)* of the Amendment Report has calculated a revised credit liability for the project in accordance with the BAM, which takes into account the extent of vegetation clearing (this includes vegetation cleared from the road widening proposed). It is acknowledged that the cost of biodiversity credits can change over time depending on the demand and supply of credits in the biodiversity credit market and other factors.

Technical Report 1 – Biodiversity development assessment report and *Appendix E (Revised biodiversity development assessment report)* of the Amendment Report has assessed indirect impacts in section 8.2 as well as habitat connectivity as part of prescribed impacts in section 8.3.

7.2.3 Aboriginal heritage

Management and mitigation

Summary of issue

Lake Macquarie City Council acknowledged that the project impacts known Aboriginal sites and sections of the Lake Macquarie City Council Sensitive Aboriginal Cultural Landscape. Council recommended that the mitigation measures in the Aboriginal cultural heritage assessment and any others in the main EIS are adopted in any Conditions of Approval for the HTP.

Response

The mitigation measures and management plans proposed in the EIS will be implemented during construction and operation of the HTP. This includes those listed in *section 9.5, Chapter 9 (Aboriginal heritage)* of the EIS as well as those detailed in *Technical Report 2 – Aboriginal heritage impact assessment*. This also includes any updated mitigation measures listed in *Appendix D (Updated mitigation measures)* and in the revised assessment provided in *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report.

7.2.4 Visual

Impact to public viewpoints

Summary of issue

Lake Macquarie City Council asserted that the landscape and visual impact assessment was inadequate and required further work, particularly regarding long-distance visibility.

Council stated that the landscape and visual impact assessment failed to demonstrate the full visual impact of the project, especially the permanent vegetation clearing and transmission towers. Council noted that:

- further assessment is needed to determine the visibility of clearing and towers from key public areas, including:
 - Lake Macquarie
 - ridges around Morisset
 - the M1 Motorway
 - other locations in the LGA.
- two viewpoint assessments show ‘low to negligible impact’, due to the towers being screened by existing vegetation outside the project impact area, however, these viewpoints were located within 400 metres of the proposed towers and therefore do not demonstrate the broader potential impact associated with the permanent vegetation clearing, which is likely to be visible from public areas
- the methodology primarily focused on areas within 1.625 kilometres of the corridor and visual assessment at private residences, neglecting potential long-distance and aerial visual impacts
- vegetation clearing in the Watagan Mountains and coastal escarpment mountains (described as LC2 Forested Hills) has the potential to be visible for long distances (10-20+ kilometres) but has

not been assessed. This is where the largest number of people live and travel, suggesting the actual visual impacts may be highest.

Council recommended that further visual impact assessment be undertaken focusing on the long-distance visibility of vegetation clearing from the Lake Macquarie coastal plains, the M1 Motorway, and Lake Macquarie.

Response

The Transmission Guideline, Technical Supplement for Landscape Character and Visual Assessment (DPHI 2024a) (Technical Supplement) requires the identification and assessment of viewpoints within 1.625 kilometres of the project (based on a maximum tower height of 85 metres). Therefore, the visual impact assessment identified and assessed viewpoints mostly located within the visual study area. However, in addition to this, important viewpoints (such as culturally significant ridgelines) beyond the study area were identified and included in the visual impact assessment. The view from important ridges has been considered in *Technical Report 3 – Landscape character and visual impact assessment* and *Appendix G (Landscape character and visual impact assessment addendum)* of the Amendment Report. Ridges identified in the vicinity of Morisset are relatively low in elevation (not sufficient to see over surrounding trees to the project), generally have an eastern outlook (away from the project), and are not designated with landscape significance.

While there would be full and partial vegetation clearing within the typical 70-metre wide transmission line easement along the project corridor, there are substantial areas of trees that would be retained. This vegetation is mostly contained within reserves and State forests including Olney State Forest and Jilliby State Conservation Area. These large areas of trees (several kilometres wide) separate and provide buffer between the project and locations within Lake Macquarie LGA where people live, travel and recreate.

Clearing associated with the project and proposed towers would not be visible from Lake Macquarie. The closest new transmission tower would be over 14.5 kilometres from the edge of the lake, is higher in elevation (around 400 metres above sea level compared to the lake which is close to sea level), and is surrounded by at least five kilometres of intervening trees (within reserves and State forest surrounding the alignment, including Watagan National Park, Olney State Forest, and Jilliby State Conservation Area) between the lake and the closest transmission tower. Closer project elements, such as changes to Eraring substation, and upgrades to existing transmission lines, would occur in areas already cleared and used for the purposes of energy transmission.

The M1 Motorway is over 10 kilometres from the closest new transmission tower. Based on landform alone, there is the possibility of locations along the motorway where a direct line of sight to the top of the closest transmission tower might be possible. However, there is substantial areas of vegetation between the M1 Motorway and the project that would largely screen these views. At this distance, there is the possibility of a glimpse to the transmission line where the maximum potential removal of trees was required and aligns with a location where there was an actual direct line of sight from the M1 Motorway. Any view of a tower at this distance would be barely perceptible, comprising a very small portion of any view, and would not result in an adverse visual impact.

While no locations have been identified from within Lake Macquarie suburban areas where there could be a potential view of the cleared corridor or new transmission towers, there may be other locations where the project is visible within the Lake Macquarie local government area. If a view was

possible, any impact would not be moderate or higher due to the distance and intervening landform and vegetation.

7.2.5 Social

Community social benefits

Summary of issue

Lake Macquarie City Council requested for EnergyCo to provide local economic benefits by prioritising the employment of workers displaced by the closure of Eraring Power Station.

Council encouraged EnergyCo to consider employing or contracting suitable individuals who will face displacement due to the scheduled decommissioning of Eraring Power Station. Council noted:

- the closure timeline of the power station closely aligns with the project's construction timeline, creating a direct opportunity
- this action provides an immediate economic benefit to local residents and helps ensure skilled labour stays in the region
- this local employment, alongside the repurposing of modular housing, is a vital legacy benefit that should be included in the project planning, given the significant impact the energy transition is having on the community of Lake Macquarie.

Response

Targeted employment and training initiatives will be developed for the project, including established partnership with NSW TAFE, to address the project's labour force requirements as part of a local business and employment strategy and industry and Aboriginal participation plan (refer to *Appendix D (Updated mitigation measures)* of the Amendment Report).

EnergyCo acknowledges Lake Macquarie City Council's comments regarding potential employment opportunities for workers affected by the future closure of Eraring Power Station. Workforce transition planning and support for impacted workers is being led by the Commonwealth Government's Net Zero Economy Agency (NZEa) and supported by the NSW Government's Future Jobs and Investment Authority (FJIA). EnergyCo continues to work closely with NZEA to support the development of a Hunter Business Prospectus to showcase local business that can support the construction of the project, all with the aim of increasing local business participation in NSW Electricity Infrastructure Roadmap projects and employment prospects for transitioning workforces such as Eraring Power Station workers.

While EnergyCo is not responsible for workforce transition planning, EnergyCo's Workforce Development team is working with NSW Government agencies and regional partners to better understand projected workforce needs associated with the Renewable Energy Zones (REZs) and related infrastructure. This includes a regional socio-economic baseline study, a Skills and Training Study for the Hunter region, and work underway on a NSW Renewable Energy Jobs Guide. These programs aim to build an understanding of future skills demand, enhance prospective job seeker's access to career information and capacity to make informed decisions and support broader government initiatives that relate to regional employment pathways.

Recruitment for the HTP will ultimately be undertaken by the network operator and the construction contractors. EnergyCo will continue to share project information with NSW Government agencies responsible for workforce transition to help ensure they have visibility of upcoming project phases and indicative workforce needs across the region.

Legacy housing

Summary of issue

Lake Macquarie City Council suggested that the temporary worker accommodation built for the project should be designed so it can be repurposed after the construction is finished.

Council noted that the accommodation should use materials and methods (potentially a modular housing product) that allow Homes NSW or Community Housing Providers to reuse and relocate it. Council noted that the preferred new location would be a central and accessible spot within Lake Macquarie or the broader Hunter Region. It was suggested that repurposing the housing is consistent with the State Government's *NSW Homelessness Strategy 2025-2035 (2025)*, specifically its goals to reform temporary accommodation and increase the supply of affordable housing options (Outcomes 2.2 and 2.3).

Council noted that this approach would offer a lasting benefit to the community and help address the local housing shortage in Lake Macquarie.

Council recommended that given the substantial investment in preparing the site, EnergyCo should investigate ways to reuse the built structures, especially the dwellings, after the project is complete. This reuse could involve relocating the dwellings to other sites to support the Council's strategic goals for diverse and affordable housing in the Lake Macquarie LGA.

Response

EnergyCo recognises the importance of exploring opportunities to create positive housing and economic outcomes for local communities. EnergyCo is involved in ongoing discussions with councils regarding opportunities to provide legacy housing across EnergyCo's portfolio of projects.

Community benefits contribution

Summary of issue

Lake Macquarie noted that it has published a *Draft Section 7.11 Citywide Development Contributions Plan 2025 (2024)* (Contributions Plan) and indicated that the project may be subject to development contribution levies outlined in the Contributions Plan.

Council recommended that if the project is approved, consideration should be given to non-residential traffic generation impacts and a haulage levy to mitigate the impact on local roads.

Response

Critical State significant infrastructure (CSSI) projects are excluded from local Section 7.11 plans due to the nature of their designation under the *NSW Environmental Planning and Assessment Act 1979 (EP&A Act)*.

EnergyCo recognises Lake Macquarie City Council's concerns regarding the need to address the distribution of impacts and benefits on the project, including in relation to increased heavy vehicle movement on construction access routes within the Lake Macquarie LGA.

The distribution of community impacts and the potential benefits from the project are discussed in *section 6.3.2* (enhanced community services through community benefit investments) and *section 6.3.3* (perceived unequal distribution of project benefits creating community strain) of *Technical Report 6 – Social impact assessment*. As recognised in the assessment, EnergyCo is expecting to commence consultation with relevant communities in 2026 to inform the design and delivery of the community and employment benefit program in the Hunter-Central Coast region, which may assist in sharing of benefits with local communities hosting the project infrastructure.

Construction access routes and the indicative maximum daily traffic movements generated by construction are detailed in *section 4.3.5, Chapter 4 (Project description)* of the EIS and *Appendix A (Updated project description)* of the Amendment Report. Heavy and light vehicle traffic generated by the project would be distributed across the construction access routes. For local roads, the project would upgrade sections of one local road and several intersections in the Lake Macquarie LGA to accommodate construction traffic (refer to *Appendix A (Updated project description)* of the Amendment Report). Strategic concept designs for the intersection upgrades have been provided in *Appendix D of Appendix H (Revised traffic and transport impact assessment)* of the Amendment Report.

While application of a haulage levy is not proposed, mitigation measure TT6 (refer to *Appendix D (Updated mitigation measures)* of the Amendment Report) provides for the completion of pre-construction road dilapidation surveys and routine inspections. The surveys will assess the current condition of the road surface and will be documented in a road condition report, with a copy being provided to the relevant road authority. Routine inspections will be undertaken during and following construction to assess potential damage to local roads accessed by project-related traffic. Damage caused by the project on local roads in Lake Macquarie City Council will be rectified or compensated for during or after construction in consultation with the Lake Macquarie City Council as the relevant road authority.

The project will continue to engage with Lake Macquarie City Council as relevant to determine the specific road use and rectification requirements.

Impacts on surroundings

Summary of issue

The following were the key social impact concerns for the LGA:

- traffic impacts, including temporary and long-term impacts on traffic flow
- land use impacts on the use of private land, particularly any affected agricultural land
- amenity impacts on local quality of life, such as noise and visual impacts, for properties along the corridor and near the project.

Council noted that the project's social impact assessment identifies residual social impacts that cannot be fully mitigated, including the loss of property, loss of property use, and unresolvable traffic issues.

Response

EnergyCo acknowledges that the project may result in residual social impacts related to loss of property, land use changes, amenity impacts and traffic issues. *Technical Report 6 – Social impact assessment* of the EIS provided an assessment of these residual impacts in the following sections:

- *section 6.2.1* for land use changes due to full or partial land acquisition, which was assessed as medium (negative) for people within the corridor social locality
- *section 6.2.2* for loss of property and relocation of landowners, which was assessed as high (negative) for directly affected landowners with full acquisition and medium (negative) for directly affected landowners with partial or easement acquisition
- *section 6.2.3* for loss of residential amenity during construction, which was assessed as medium (negative) for affected people in the corridor and local social localities
- *section 6.4.4* for changed access to recreational infrastructure due to road network changes during construction, which was assessed as medium (negative) for Olney State Forest users
- *section 6.6.3* for changes to traffic movements during construction, potentially creating new road safety risks, which was assessed as medium (negative) for affected people in the corridor and local social localities (revised to low (negative) in *Appendix I (Social impact assessment addendum)* due to the revised social impact assessment guideline)
- *section 7.3.1* for changes to the natural character of landscape altering sense of place, which was assessed as medium (negative) for affected people in the corridor social locality.

Social impacts and benefits would be managed through the implementation of a social impact management plan during construction of the project (mitigation measure S01). While residual social impacts are predicted to remain, particularly for directly affected landowners, the project is also expected to deliver significant long-term residual benefits, including regional economic diversification, permanent road upgrades to support improved safety and network capacity and enhanced intergenerational equity through contributing to energy system decarbonisation and improved energy security.

Management and mitigation

Summary of issue

Lake Macquarie City Council outlined its key concerns regarding the social impacts of the project and the necessary requirements for mitigation.

Council recommended that the mitigation measures in the social impact assessment be adopted as Conditions of Approval. These measures include:

- a social impact management plan
- a community engagement strategy
- a complaints management system
- a temporary worker management plan.

Response

EnergyCo acknowledges the need for mitigation measures to manage social impacts. Potential social impacts will be minimised through the application of mitigation and management measures proposed as revised in the Amendment Report and Submissions Report. This includes:

- social impact management plan (mitigation measure S01)
- community communication strategy (mitigation measure S02)
- complaints management system (mitigation measure S03)
- temporary worker accommodation management plans (mitigation measure S07)
- other mitigation measures outlined in *Appendix I (Social impact assessment addendum)* and consolidated in *Appendix D (Updated mitigation measures)* of the Amendment Report.

7.2.6 Historic heritage

Management and mitigation

Summary of issue

Lake Macquarie City Council acknowledged that a heritage impact statement was provided in the EIS. Council recommended that the mitigation measures in the heritage impact statement and any others in the main EIS are adopted in any Conditions of Approval for the HTP. Council also requested a copy of the historic heritage management plan to be prepared for the HTP.

Response

The mitigation measures and management plans proposed in the EIS would be implemented during construction and operation of the HTP. This includes those listed in *section 15.5, Chapter 15 (Historic heritage)* and accompanying *Technical Report 7 – Historic heritage impact assessment* of the EIS and updated mitigation measures listed in *Appendix D (Updated mitigation measures)* of the Amendment Report. Management measure HH1 requires the preparation of a historic heritage management plan (HHMP). EnergyCo will share the HHMP with Lake Macquarie Council where it relates to relevant heritage items within the LGA.

7.2.7 Noise and vibration

Management and mitigation

Summary of issue

Lake Macquarie City Council acknowledged that the noise and vibration assessment was conducted according to relevant policies and guidelines. It identifies potential noise and vibration impacts from construction support sites, transmission line construction, and helicopter/drone usage. These impacts include predictions that may affect human comfort and cause cosmetic damage to buildings.

Council noted that a key matter to be confirmed is whether an environment protection license (EPL) will be required for helicopter flight movements, which would necessitate considering associated noise impacts on adjoining land uses (e.g. near flight landing sites).

Council recommended:

- implementation of a noise and vibration management plan that adheres to the mitigation measures outlined in the noise and vibration assessment
- development of a community engagement strategy and complaints management system specifically to address issues arising from helicopter movements (following approval of an EPL).

Response

As noted in *section 5.2.2, Chapter 5 (Statutory context)* of the EIS, the anticipated number of helicopter movements during construction of the HTP may exceed the threshold and would require an EPL under Chapter 3 of the *NSW Protection of the Environment Operations Act 1997* (POEO Act), however, this would be confirmed during detailed design.

Mitigation measure NV1 requires a noise and vibration management plan to be prepared for the construction of the project (refer to *Appendix D (Updated mitigation measures)* of the Amendment Report). This plan would include the relevant noise and vibration mitigation measures included in the EIS.

A community communication strategy (mitigation measure S02) will require the implementation of targeted communications with the community regarding impacts (including noise), proactive targeted engagement with stakeholders located near the Freemans Drive construction support site, and the implementation of mechanisms for the community to provide feedback.

Mitigation measure S03 also requires a complaints management system be established and maintained throughout the construction period and for a minimum of 12 months after the completion of construction. Complaints arising from helicopter movements could be issued through this system.

7.2.8 Surface water

Management and mitigation

Summary of issue

Lake Macquarie City Council noted that the project, particularly track and road upgrades and any permanent roof/gutter systems, may lead to stormwater runoff impacts. Council also acknowledged that due to the scale of the project, limited detail is available regarding the specific stormwater management required.

Council recommended that if the project is approved, Conditions of Approval must be imposed that mandate the submission of detailed stormwater management designs for track and road upgrades and any infrastructure with a permanent roof/gutter system.

Stormwater management designs should use:

- Lake Macquarie City Council's Development Control Plan *Drainage Design Handbook* for permanent structures
- Austroads and Lake Macquarie City Council's *Engineering Design Guidelines* for road-related infrastructure (where Council is the road authority).

In addition, Council noted that if watercourses are impacted by stormwater discharge from new infrastructure, advice and approval may be required from the Natural Resource Access Regulator.

Response

The potential impacts to surface water and flood behaviour are presented in *Chapter 17 (Surface water)* and *Chapter 19 (Flooding)* of the EIS. It is acknowledged that temporary and permanent infrastructure would interact with drainage lines and would change stormwater flows due to alterations to local catchments, construction of watercourse crossings or increases in impervious

areas. These impacts would be localised, and/or mitigated through the implementation of the mitigation measures identified in the EIS.

As noted in section 17.5.1 of the EIS, and as required in mitigation measure SW1, a soil and water management plan (SWMP) will be prepared for the HTP and will provide mitigation measures to minimise impacts on soils and water (see *Appendix D (Updated mitigation measures)* of the Amendment Report). The SWMP will identify foreseeable risks relating to water quality during construction and will detail how these risks will be managed and will contain strategies and controls for managing erosion and sediment control and stormwater management plans. In addition to the SWMP, the following mitigation measures will be implemented to protect surface water quality:

- a water quality monitoring program (as part of the SWMP), which will focus on locations with sensitive receiving environments (mitigation measure SW4)
- erosion and sediment control plans (mitigation measure SW3), supported by further field assessment and soil ground truthing program (mitigation measure SL1)
- stormwater management measures for mobile and temporary concrete batching plants (mitigation measure SW6)
- controls on the storage of chemicals, fuels and other hazardous substances, and response to accidental spills (mitigation measures DG1 and DG2)
- rehabilitation of disturbed areas to manage erosion and soil risks (mitigation measure SL3, SL4 and SL5).

The detailed layout of construction support sites, which would include temporary roofed structures, would occur during detailed design, and will include measures to mitigate alterations to local runoff conditions and limiting the extent of any required flow diversions (mitigation measures SW5 and FL1). For Freemans Drive construction support site, this will include approaches to minimise changes to the conveyance of flow in Jigadee Creek and overland flow paths.

The detailed design of road and intersection upgrades where Lake Macquarie City Council is the relevant road authority will occur in consultation with Lake Macquarie City Council. This will include consideration of relevant Lake Macquarie City Council guidelines alongside Austroad guidelines. Where relevant, this would include further flood modelling to inform the layout of the associated drainage measures that are aimed at controlling external catchment runoff (mitigation measure FL14).

As required by mitigation measure FL13, drainage control measures would be incorporated into the upgraded access tracks and new access tracks to manage runoff and the impact it could have on scour to the tracks and surrounding areas. These drainage control measures would be implemented in accordance with the following guidelines:

- *Guidelines for the Planning, Construction and Maintenance of Tracks* (Department of Land & Water Conservation, 1994)
- *Managing Urban Stormwater: Soils and Construction – Volume 2C Unsealed Roads* (Department of Environment and Climate Change, 2008c).

Scour protection would be provided to manage localised increases in flow velocities upstream and downstream of watercourse crossings along the upgraded or new access tracks, while the access tracks would be lined or stabilised where required to manage scour of the track and the impact this could have on the displacement of sediment into the downstream watercourse.

The expansion of the Eraring substation will be designed to manage adverse impacts on the receiving drainage lines as a result of the changes in the depth, velocity, extent and duration of flow during storms up to one per cent AEP event in intensity (mitigation measure FL8) and with consideration to the general stormwater management principles outlined in mitigation measure SW5. Scour protection and energy dissipation measures will also be provided at any new or modified drainage outlets (mitigation measure FL11).

The HTP is a CSSI project and approvals under section 89, 90 or 91 of the *Water Management Act 2000* (other than aquifer interference) are not required by virtue of section 5.23 of the EP&A Act. This includes controlled activities such as work on waterfront land. While the HTP is exempt from the need for controlled activity approvals, the various controlled activity guidelines for activities on waterfront land were used in the assessment of the HTP and will be considered in detailed design for certain features such as the transmission tower locations, construction support sites and access tracks (refer to mitigation measure SW2 and SW3).

7.2.9 Soils and contamination

Management and mitigation

Summary of issue

Lake Macquarie City Council acknowledged that the project faces a medium to high contamination risk primarily due to the Eraring Power Station, which is identified as the single largest contamination risk in the LGA. Council also acknowledged that a medium risk also applies to rural/agricultural land, particularly near farm dams.

Council suggested that to mitigate this risk, the project should implement the measures outlined in *Technical Report 13 – Contamination preliminary assessment*. This includes performing a detailed investigation and management of contamination in line with relevant standards and legislation, such as the *National Environment Protection (Assessment of Contamination) Measure 1999*, the *NSW Contaminated Land Management Act 1997*, and the *NSW Protection of the Environment Operations Act 1997*. This will include a detailed site investigation and a remedial action plan, where appropriate.

Response

The mitigation measures outlined in *Technical Report 13 – Contamination preliminary assessment* (and *Appendix D (Updated mitigation measures)* of the Amendment Report) will be implemented as relevant during construction of the project. A contamination management plan will be developed and implemented during detailed design and construction as per mitigation measure C1. The contamination management plan will be in accordance with the relevant standards and legislation and will outline the requirements and process for a detailed site investigation and a remedial action plan, where appropriate.

Summary of issue

Lake Macquarie City Council noted that the project may impact potential acid sulfate soils within a small 0.1-hectare area at the proposed intersection upgrade of Freemans Road and Martinsville Road, Cooranbong. Council recommended that if works in this area involve excavations to levels that

may disturb potential acid sulfate soils, an acid sulfate soils management plan should be prepared and implemented, and this should be made a condition of consent for the HTP.

Response

Section 20.3.1, Chapter 20 (*Soils and contamination*) of the EIS has outlined a project approach to managing acid sulfate soils. The proposed intersection upgrade of Freemans Drive / Martinsville Road is likely to have low impacts on acid sulfate soils. Nonetheless, if soil disturbance is required, targeted soil testing would be undertaken in those areas mapped as containing potential acid sulfate soils prior to construction to confirm any acid sulfate soils risks present and an acid sulfate soils management plan (ASSMP) would be prepared, if required.

7.2.10 Bushfire

Management and mitigation

Summary of issue

Lake Macquarie City Council acknowledged that a bushfire assessment for both the transmission line and the temporary worker accommodation in the LGA was included in the EIS. Council recommended that the mitigation measures contained within the bushfire assessment be adopted and included in any Conditions of Approval for the HTP.

Response

The mitigation measures and management plans proposed in the EIS will be implemented during construction and operation of the HTP. This includes those listed in section 21.5, Chapter 21 (*Hazards and risk*) of the EIS and section 7.3 of *Technical Report 14 – Bushfire risk assessment* and updated mitigation measures listed in Appendix D (*Updated mitigation measures*) of the Amendment Report, including (but not limited to):

- implementation of a bushfire emergency management and evacuation plan (mitigation measure BF1), a bushfire safety system (mitigation measure BF2) and a works quality auditing process to assess the implementation of the implemented measures (mitigation measure BF3)
- the requirement to design, operate and maintain the project to reduce bushfire risk to and from the project infrastructure in accordance with the applicable standards (mitigation measure BF4)
- provision of asset protection zones (mitigation measure BF5) at Bayswater South and Olney switching stations, temporary worker accommodation and project office buildings at construction support sites, in accordance with the requirements of *Planning for Bushfire Protection 2019* (NSW RFS 2019) and NSW RFS standards for APZ, and the routine inspection and control of vegetation within the APZ (mitigation measure BF5).

7.2.11 Other matters

Climate change and greenhouse gases – greenhouse gas emissions

Summary of issue

Lake Macquarie City Council stated that carbon emissions from the vegetation clearing required for the transmission corridor are significant, estimated at 323,000 tonnes over the three-year construction period. Council noted that this vegetation clearing is the largest source of project emissions after embodied emissions and that these emissions are not being offset. Council recommended that these impacts be considered for inclusion in the SODA for the HTP.

Response

EnergyCo notes the feedback regarding greenhouse gas emissions and the suggestion to offset or further reduce emissions associated with vegetation clearing.

The *Technical Report 18 – Air quality and greenhouse gas impact assessment* and *section 22.2, Chapter 22 (Other matters)* of the EIS includes a quantitative assessment of greenhouse gas emissions (GHG) emissions from construction and operation of the project.

As part of the Amendment Report, the GHG emissions assessment has been updated to reflect refinements to the project, including revised vegetation clearing extents. The amended assessment estimates total construction-related emissions of approximately 678,750 tonnes CO₂-e, with the majority of emissions associated with the loss of carbon sink resulting from vegetation clearing.

EnergyCo is committed to managing and reducing project-related emissions in accordance with *section 22.2.5 of the EIS and Appendix D (Updated mitigation measures)* of the Amendment Report. Opportunities to minimise Scope 1 and 2 emissions include use of energy-efficient plant and equipment, optimisation of construction scheduling to reduce fuel use, and procurement of lower-emission materials where practicable.

The proposal for carbon offsets is noted. Under the current NSW regulatory framework, offsets for GHG emissions are not required for linear transmission infrastructure. The project's operation would, however, support long-term emissions reduction across NSW by facilitating the connection and delivery of renewable energy from the Central-West Orana and New England REZs to the National Electricity Market, contributing to statewide decarbonisation objectives.

The SODA reflects biodiversity impacts based on an assessment of offset liabilities under the BAM which does not include carbon emissions. The SODA for the HTP is intended to support implementation of the Hunter Conservation Investment Strategy, which identifies priority investment areas for biodiversity outcomes such as ecological restoration, habitat protection and landscape connectivity improvements. These actions include restoring degraded ecosystems, protecting high-value vegetation, and enhancing climate resilience through targeted investment (see *Hunter Conservation Investment Strategy (DCCEE 2025)*).

To that effect, while the SODA does not quantify or offset carbon emissions, its delivery would coincidentally contribute to improved vegetation condition and long-term landscape resilience, aligning with Council's broader concern about vegetation loss by directing investment toward protection and restoration of native vegetation in priority areas. Several mitigation measures are also identified to minimise disturbance to vegetation during construction including approaches to

further minimise impacts to threatened ecological communities, threatened species habitat and riparian vegetation (mitigation measures B2, B10 and B20), and limiting vegetation clearance to the minimum extent possible to maximise visual screening and retention of the existing landscape character (mitigation measure LV1).

Air quality – management and mitigation

Summary of issue

Lake Macquarie City Council noted that the air quality and greenhouse gas impact assessment anticipates minor air quality impacts. Council recommended implementing a construction air quality management plan that incorporates the mitigation measures outlined in *Technical Report 18 – Air quality and greenhouse gas impact assessment*. Council also recommended that the project confirm whether the concrete batching plant operations require an EPL.

Response

Mitigation measure AQ1 requires the implementation of a construction air quality management plan that will include appropriate measures to mitigate the risk of air quality impacts from the project during construction. This will include the measures as identified in *Technical Report 18 – Air quality and greenhouse gas impact assessment* and reflected in mitigation measure AQ2. Refer to *Appendix D (Updated mitigation measures)* of the Amendment Report for further details.

Schedule 1 of the *Protection of the Environment Operations Act 1997* does not identify concrete batching plants as a scheduled activity and therefore a licence is not required. Mitigation measures have been identified to address the potential air quality and water quality impacts from the use of concrete batching plants during construction (mitigation measures AQ4 and SW5).

Waste management – general waste management

Summary of issue

Lake Macquarie City Council acknowledged that waste management plans would be implemented. However, it was unclear whether Council's waste services would be needed, particularly for the temporary workers' accommodation sites. Council recommended that if the project intends to use Council's waste services, further consultation with the Council's waste collection services team would be required.

Response

EnergyCo acknowledges Lake Macquarie City Council's request for clarification regarding use of its waste collection services for temporary worker accommodation sites.

As outlined in section 22.3, *Chapter 22 (Other matters)* of the EIS and consistent with mitigation measure WM1 in *Table 22.16 (Proposed mitigation and management measures – Waste)*, a waste management and resource recovery plan will be prepared prior to construction. The plan will identify all waste streams associated with construction and operation, including waste generated at temporary worker accommodation facilities, and will confirm arrangements for lawful collection, storage and disposal.

If Lake Macquarie City Council's waste services are proposed to be used, further consultation will be undertaken with Lake Macquarie City Council's waste services team during detailed design to confirm service requirements and contractual arrangements.

Waste management – sewerage management

Summary of issue

Council noted that no sewerage management details were provided for the temporary workers' accommodation sites. Council recommended that further information be provided to detail how sewerage would be managed at these sites. Council noted that if on-site management (such as a waste treatment device or storage facility) is proposed, an approval will be needed under Section 68 of the *NSW Local Government Act 1993*.

Response

On-site wastewater treatment plants will be provided at construction support sites. The proposed treatment system would be a contained system and may include mechanical screening, biological and chemical treatment, filtration and disinfection. Waste solids produced by the treatment system would be emptied by a licensed contractor and disposed of at a nearby council operated wastewater treatment plant or other appropriately licensed facility. Further detail is provided in *section A4.4 of Appendix A (Updated project description)* of the Amendment Report.

Any on-site wastewater treatment plants would be subject to further design development during detailed design and would:

- consider and confirm the most appropriate system for the project based on the preferred site layout, site conditions and constraints
- be designed, constructed, operated, maintained and decommissioned in accordance with best practice and relevant guidelines and standards, such as:
 - *Onsite domestic wastewater management, Designing and Installing On-Site Wastewater Systems* (WaterNSW 2019)
 - *AS/NZS 1547:2012 On-site domestic wastewater management* (Standards Australia and Standards New Zealand 2012)
 - *Australian Guidelines for Water Recycling: Managing Health and Environmental Risks (Phase 1)* (Environment Protection and Heritage Council, National Resource Management Ministerial Council, and Australian Health Minister's Conference 2006).

During operation, any wastewater produced at permanent operational facilities, such as staff facilities at switching stations would be disposed of via a suitable system such as a septic tank, with treated water pumped to a landscaped disposal area, or removed from site for treatment at an appropriately licensed facility, consistent with the EIS.

Design and operation of wastewater systems for the temporary accommodation sites will be consistent with the *Local Government Act 1993* and the *Protection of the Environment Operations Act 1997*. Where on-site treatment or storage systems are proposed, the contractor will obtain approval under section 68 of the *Local Government Act 1993* prior to installation and operation.

7.2.12 Justification and conclusion

Project costs and ecologically sustainable development

Summary of issue

Lake Macquarie City Council commented that in its review of ecologically sustainable development, the EIS notes that “where potential impacts cannot be avoided, mitigation measures would be implemented to reduce the impact as far as possible. An offsets strategy has been developed to compensate for the potential threatened species impacted by the project.” Council noted that the offsets strategy has not been located within the EIS. Council recommends that estimates of the economic value of the biodiversity that is proposed to be lost and the carbon emissions and forgone sequestration of carbon due to the clearing and operation of the project are recommended to be considered as part of the economic analysis and cumulative impact assessment.

Response

Impacts to biodiversity are required to be offset financially per the NSW BC Act. The estimated biodiversity credit liability requirements for the HTP have been calculated using the *Biodiversity Assessment Method Calculator* (BAM-C). The total credit liability was calculated at 234,725 in the EIS (refer to *Table 8.16*). This has been updated to include the proposed amendments and is currently estimated at 300,892 (refer to *Appendix E (Revised biodiversity development assessment report)* of the Amendment Report).

EnergyCo will enter into a SODA with the Secretary of the NSW DCCEEW for the HTP. Under this agreement, responsibility for delivering biodiversity offsets will be transferred to NSW DCCEEW with commensurate funding from EnergyCo, as detailed in *Appendix E (Revised biodiversity development assessment report)* of the Amendment Report. The details of the offsets strategy will be as per the SODA and will be published on the NSW DCCEEW website once the agreement is made.

An estimated development cost (EDC) has been provided to DPHI per the SEARs and as defined in Regulation 6 of the Environmental Planning and Assessment Regulation (EP&A Regulation). The EDC includes the biodiversity offsets associated with the HTP.

As discussed in *section 7.2.11* of this Submissions Report, EnergyCo will continue to pursue feasible emissions-reduction and efficiency opportunities during the detailed design and delivery of the HTP in accordance with the commitments outlined in the EIS and Amendment Report.

7.2.13 Cumulative impacts

General cumulative impacts

Summary of issue

Lake Macquarie City Council detailed concerns that the cumulative impact assessment did not consider several key risks. These include:

- risks from disturbance and the associated spread of weeds and pathogens
- impacts arising from access track construction on public access, consequent sedimentation and water quality impacts, and overall cumulative degradation

- the progressive loss of species as a result of climate change.

Council recommended that the above risks should be considered in the cumulative impact assessment for the HTP.

Response

EnergyCo acknowledges the matters raised by Lake Macquarie City Council regarding cumulative environmental risks.

The EIS assessed biosecurity risks, including the potential spread of weeds and pathogens, in *section 13.3.5, Chapter 13 (Agriculture)* and *Technical Report 5 – Agriculture impact assessment*, with mitigation measures outlined in *section 13.5.2* of the EIS. Further mitigation measures have been considered in *Appendix D (Updated mitigation measures)* of the Amendment Report. Mitigation measure B7 constitutes preparation of a biosecurity management plan to cover biosecurity aspects such as weed and pathogen introduction and management. The plan will form a sub-plan to the BMP.

Potential impacts associated with construction of access tracks, including changes to public access, were considered in *Chapter 11 (Traffic and transport)* and *Chapter 12 (Land use and property)* of the EIS with mitigation measures outlined in *sections 11.5* and *12.5*. Sedimentation and water quality impacts arising from ground disturbance were assessed in *Chapter 17 (Surface water and hydrology)* of the EIS, with mitigation measures applied to manage erosion and sedimentation (see mitigation measure SW3). Water quality monitoring would be implemented as part of the mitigation measure SW4. Further mitigation measures have been considered in the *Appendix D (Updated mitigation measures)* of the Amendment Report. Mitigation measure TT13 outlines that coordination with Lake Macquarie City Council will be undertaken during detailed design and construction planning on the interface of the HTP construction requirements and the safety improvements proposed by Council for the Martinsville Road/Freemans Drive intersection.

In *Chapter 23 (Cumulative impacts)* of the EIS, relevant cumulative interactions – such as overlapping disturbance from multiple projects – were identified in accordance with the *Cumulative Impact Assessment for State Significant Projects* guideline (DPIE 2021), and updated where relevant as summarised in *section 5.20 (Cumulative impacts)* of the Amendment Report. Proposed mitigation measures are outlined in *section 23.4* of the EIS. Broader environmental trends such as climate-driven species decline are strategic matters outside the scope of project-level cumulative impact assessment as defined by the guideline.

7.3 Muswellbrook Shire Council

7.3.1 Project description (construction)

Temporary worker accommodation

Summary of issue

Muswellbrook Shire Council requested demonstration of how on-site water supply systems (including the impact on Council's potable water processing capacity) and on-site sewerage would be managed at worker accommodation located at Hebden Road. Muswellbrook Shire Council requested this information be clarified in the Submissions Report.

Response

As identified in *section 4.3.7, Chapter 4 (Project description)* of the EIS, site infrastructure for temporary worker accommodation would be fully self-contained with respect to water and wastewater systems.

Potable water would be sourced from Singleton Council potable water supplies and/or from Hunter Water (refer to *section 4.4.4 and section 5.3.1 of Technical Report 10 – Surface water impact assessment* of the EIS). It is not intended to source potable water from Muswellbrook Shire Council.

The updated project description, included in *Appendix A (Updated project description)* of the Amendment Report has noted the following additional information with regards to wastewater treatment:

Wastewater management at temporary worker accommodation facilities and construction support sites would be provided by an on-site treatment system. The proposed treatment system would be a contained system and may include mechanical screening, biological and chemical treatment, filtration and disinfection. Waste solids produced by the treatment system would be emptied by a licensed contractor and disposed of at a nearby council operated wastewater treatment plant or other appropriately licensed facility.

Treated effluent suitable for reuse for construction purposes, which is anticipated to include dust suppression and earthworks conditioning, would be stored in sealed tanks. The project does not propose to discharge treated wastewater into the receiving environment.

Following completion of construction activities, all temporary wastewater management infrastructure would be decommissioned and removed from the project impact area.

Temporary worker accommodation – appearance

Summary of issue

Muswellbrook Shire Council noted that the importance of the aesthetic appearance of the Gouldsville Road temporary worker accommodation in Singleton LGA was emphasised in the social impact assessment included in the EIS. Muswellbrook Shire Council stressed that this is also applicable to the construction support site at Hebden Road in the Muswellbrook Shire LGA. Muswellbrook Shire Council noted that the appearance of the temporary worker accommodation is crucial for the mental health, well-being, and morale of the workers, as well as for community

perception, especially since the construction support site would be visible from the road. Muswellbrook Shire Council requested that an indicative design of the temporary worker accommodation at Hebden Road be included in the Submissions Report.

Response

Section 6.3.1 of *Technical Report 6 – Social impact assessment* of the EIS provides an assessment of the social impacts related to workforce presence affecting perceptions of safety and community cohesion. This section acknowledges the need to consider minimising potential visual impacts in the site design and aesthetics for the construction support sites. A temporary worker accommodation management plan will be implemented as per mitigation measure S07 to manage the potential for social impacts arising from the Hebden Road construction support site. Noise, visual and traffic management will also mitigate the project's potential to detract from existing uses and values (refer to *Appendix D (Updated mitigation measures)* of the Amendment Report).

A description of the likely components of the construction support sites and facilities located at the temporary worker accommodation was provided in *section 4.3.6* and *section 4.3.7, Chapter 4 (Project description)* of the EIS and updated in *section A.3.6* and *section A.3.7, Appendix A (Updated project description)* of the Amendment Report.

EnergyCo is unable to provide a design of the construction support site/temporary worker accommodation located at Hebden Road. This is because the design will be subject to the preference of the design and construct contractor(s) yet to be appointed for the HTP. However, as plans for the construction support site/temporary worker accommodation at Hebden Road are developed, EnergyCo will provide these plans to Muswellbrook Shire Council.

Temporary worker accommodation – operational details

Summary of issue

Muswellbrook Shire Council requested detail on the indicative workforce numbers (including both average and peak figures) for the temporary workers accommodation/construction support site at Hebden Road. Muswellbrook Shire Council also requested the anticipated arrival schedules and the duration of stays for the workers. Muswellbrook Shire Council noted that this information is necessary to properly assess and plan the appropriate scale, timing, and potential for shared use of the temporary worker accommodation facilities across the LGA.

Response

EnergyCo acknowledge Muswellbrook Shire Council's request for detailed information regarding workforce numbers at the proposed Hebden Road construction support site and temporary worker accommodation. The construction support site would have a maximum capacity for up to 300 workers, as noted in *section 4.3.7, Chapter 4 (Project description)* of the EIS. Specific, detailed workforce metrics (including the final average and peak numbers, arrival schedules, and duration of individual stays) would be dependent on the construction methodologies and scheduling decisions made by the appointed design and construct contractor(s). Workforce details for the Hebden Road construction support site and temporary worker accommodation will be shared (when available) with Council.

Construction access routes

Summary of issue

Muswellbrook Shire Council requested clarification on the planned use of, and resulting impact on, Edderton Road and Thomas Mitchell Drive from the HTP. Muswellbrook Shire Council also stated that the safety of the access point connecting Edderton Road to the proposed transmission line needs to be clarified in the EIS.

Muswellbrook Shire Council acknowledged that a small section of Pikes Gully Road within the Muswellbrook Shire LGA would be affected by the HTP. Muswellbrook Shire Council noted that the intended activity on this section would be limited to dilapidation surveys only. Muswellbrook Shire Council requested clarification that no upgrades or new intersections are currently proposed for Pikes Gully Road.

Response

Road intersections that would be used by the project and would require upgrading, widening or modification for construction vehicle use and access are listed in *Table A-11* of the Amendment Report.

Thomas Mitchell Drive and Edderton Road via the New England Highway would be used during construction of the HTP, as shown in *Table 4.7* of the EIS. Specifically, these roads would be used for construction vehicles (light and heavy vehicles) travelling to/from the existing transmission line to strengthen existing towers and restrung a section of the existing transmission line during construction of the HTP. These works would fall outside of the peak project traffic generation phase and require much lower traffic volumes (in the order of 10 light vehicles and five heavy vehicles in the peak hours).

Section 5.3.2 of Appendix H (Revised traffic and transport impact assessment) of the Amendment Report has assessed the impacts of the project on the New England Highway / Thomas Mitchell Drive, Denman Road / Thomas Mitchell Drive and Denman Road / Edderton Road intersections in response to submission. This assessment concluded that the project would not impact the operational performance of these intersections, that no upgrades were required and the intersections are SISD compliant.

The existing access track connecting Edderton Road to the existing transmission line easement is a private road (McDonalds Road). Given the low volumes of HTP construction traffic using this existing intersection, no turn warrant treatments are required. The SISD assessment identified that the intersection is non-compliant, and additional controls would be implemented in accordance with mitigation measure TT2 (such as temporary speed reductions) (refer to *Appendix D (Updated mitigation measures)* of the Amendment Report).

The following treatments would be required at the intersection of Pikes Gully Road/new access road to the Pikes Gully Road construction support site in Howick (Singleton LGA):

- localised intersection widening on the access road for turning vehicles
- a basic left turn and basic right turn intersection
- road widening on Pikes Gully Road in the vicinity of the new access.

Pre-construction road dilapidation surveys and routine inspections will be completed along all nominated construction routes on local roads (mitigation measure TT6). Where rectification works are required due to project impacts, consultation with the appropriate road authority will be undertaken to confirm the scope of the work required.

EnergyCo will continue to consult with Muswellbrook Shire Council on the required intersection works for the construction support site as the relevant road authority for Pikes Gully Road and will provide the results of the pre-construction surveys and assessments.

Water supply and resources

Summary of issue

Muswellbrook Shire Council raised concerns about the limited capacity of the Council-managed water treatment facilities (which produce potable water) to meet the cumulative demands of all projected temporary construction workforces in the LGA. Muswellbrook Shire Council noted that staff are actively developing a strategy to allow project proponents to use recycled water for construction activities where potable water is not strictly necessary.

Response

Potable water would be sourced from Singleton Council potable water supplies and/or from Hunter Water (refer to *section 4.4.4* and *section 5.3.1 of Technical Report 10 – Surface water impact assessment* of the EIS). It is not intended to source potable water from Muswellbrook Shire Council.

EnergyCo has consulted Muswellbrook Shire Council regarding the supply of non-potable water for the project and will consider this into the detailed design stage of the HTP.

Utilities

Summary of issue

Muswellbrook Shire Council noted that stormwater lines owned by Muswellbrook Shire Council will need adjustment to accommodate the HTP. Muswellbrook Shire Council assumed the specific location to be alongside Hebden Road but requested that this assumption is clarified in the Submissions Report.

Response

An updated schedule of potential utility adjustments is provided in *Appendix B (Revised utility adjustments schedule)* of the Amendment Report. At this stage, stormwater lines owned by Muswellbrook Shire Council are not anticipated to be impacted by the HTP. However, utility adjustments would be confirmed during detailed design of the project and in consultation with the relevant stakeholders, including if needed with Muswellbrook Shire Council.

7.3.2 Statutory context

Planning approval process

Summary of issue

Muswellbrook Shire Council stated that it prefers that the 'principal entity' (not the contractors) submit any required section 138 permit applications for works on a public road, as this method has been shown to be more effective.

Response

Approvals under section 138 of the Roads Act are only required where works are proposed on classified roads or Crown roads by virtue of section 5 of Schedule 2 of the Roads Act. Irrespective, EnergyCo will continue to work with Muswellbrook Shire Council on the proposed design of the intersection upgrades on unclassified roads where Muswellbrook Shire Council is the relevant road authority.

7.3.3 Biodiversity

Biodiversity offsets

Summary of issue

Muswellbrook Shire Council acknowledged the commitment from EnergyCo regarding biodiversity offsets for the HTP. Specifically, that EnergyCo is committed to a strategic approach for delivering biodiversity offsets in the Hunter Region. This approach would be developed in collaboration with the NSW Conservation Programs, Heritage and Regulation (CPHR), and will take the form of a SODA.

Response

EnergyCo acknowledges the above comment from Muswellbrook Shire Council.

7.3.4 Landscape and visual

Impact to public viewpoints

Summary of issue

Muswellbrook Shire Council expressed concern regarding the visual impact of the project on motorists traveling along the Golden Highway toward Denman. This concern focused on the combined, cumulative visual/aesthetic effect of the new infrastructure when viewed alongside existing coal mines and other infrastructure, and how this would impact the overall perception of Muswellbrook Shire.

Muswellbrook Shire Council noted that it previously requested an assessment of views traveling north along the Golden Highway. Specifically, it requested a figure showing any existing visual treatments and options for additional treatments to mitigate cumulative impacts adjacent to the road.

Muswellbrook Shire Council noted that the landscape and visual assessment mentioned that ‘treatment along the Golden Highway at the District entry is proposed as an outcome’ of a joint Council/DPHI assessment to ‘soften the visual impacts of existing energy infrastructure.’ Muswellbrook Shire Council requested the location and nature of this proposed visual treatment to be clarified in the Submissions Report.

Response

The impact to views from the Golden Highway was considered in *section 6.2 of Technical Report 3 – Landscape character and visual impact assessment* of the EIS. As a linear viewpoint, the view from the Golden Highway and distance to the project, changes with movement along the route. Therefore, two locations on the Golden Highway were identified for assessment. Viewpoint 3 considered the view north (the view of motorists travelling toward Denman), from the closest location to the project (around 1.4 kilometres away), that provided the least obstructed view of the project. A photomontage view toward the project is shown in *Appendix G of Technical Report 3 – Landscape character and visual impact assessment*, page G-3 of the EIS. As shown in the photomontage view, the transmission towers would be visible, but would not be prominent or distracting, and for the most-part, would most likely be missed by the casual observer. In accordance with the Technical Supplement, as a scenic highway, the sensitivity of the view from the Golden Highway is categorised as 'low', the magnitude of change to the view was determined to be 'low', therefore, the overall potential impact of the project on the view from the Golden Highway was 'low'.

A review of the daytime construction impacts to public viewpoints assessed as part of the EIS was undertaken in *Appendix G (Landscape character and visual impact assessment addendum)* of the Amendment Report to identify any potential changes to the impacts as a result of the amended project. Potential visual impacts from the Golden Highway would be consistent with the EIS.

As shown in the photomontage, intervening trees between the Golden Highway and the project, would screen the lower portion of most of the transmission towers. Additional mitigation screening was not determined to be required. Screening is considered to be ineffective close to the transmission easement, and screening would block the open view of the landscape if close to the Golden Highway. Therefore, a figure showing proposed visual treatments was not included in *Technical Report 3 – Landscape character and visual impact assessment*.

As reported in *section 5.2.3 of Technical Report 3 – Landscape character and visual impact assessment* of the EIS, treatment along the Golden Highway at the District entry and through Jerrys Plains is proposed as an outcome in the joint Muswellbrook Shire Council and DPHI *draft Landscape Character and Scenic Value Assessment* (Gyde, 2024) to soften the impact of built infrastructure (mines, quarries, transmission lines, etc). The assessment does not identify where the treatment is proposed or what it would entail and remained in draft at the time of preparing the landscape character and visual impact assessment.

7.3.5 Traffic and transport

Road safety impacts

Summary of issue

Muswellbrook Shire Council expressed concern regarding the traffic assessment and the required actions related to the Hebden Road / New England Highway intersection and the condition of Hebden Road. Muswellbrook Shire Council concluded with a note on the site access to the construction support site at Hebden Road.

Muswellbrook Shire Council requested that EnergyCo conduct a Road Safety Audit (RSA) for the access to Hebden Road construction support site and for all of Hebden Road leading to the site. Muswellbrook Shire Council suggested that the audit must assess the safety and functionality of the right-hand turn onto the New England Highway and consider the cumulative traffic impact with the proposed Hunter-Central Coast Renewable Energy Zone (HCC REZ) transmission project. Muswellbrook Shire Council suggested that the RSA undertaken for the HCC REZ transmission project may be usable for this project, with results integrated into a Council-consulted traffic management plan for the HTP.

Muswellbrook Shire Council acknowledged that the intersection upgrade at the Hebden Road/new access to the construction support site at Hebden Road (I-48) involves localised intersection widening and would be a BAL/BAR intersection. Muswellbrook Shire Council noted that any upgrade must be undertaken in accordance with Austroads standards.

Muswellbrook Shire Council noted that Hebden Road is a rural sealed road of variable standard, generally two lanes but with sections where only one lane is possible, and shoulders are not always present. It has an 80 kilometre/hour speed limit and is also used by Australian Rail Track Corporation (ARTC) every six weeks for maintenance, leading to considerably higher peak traffic volumes at those times. Muswellbrook Shire Council requested that EnergyCo prepare a traffic assessment to evaluate the road's suitability, recommend necessary upgrades, and propose traffic management options, taking into account the cumulative impacts of the HCC REZ transmission project and regular users like ARTC.

Response

The Hebden Road/New England Highway intersection, the intersection with the Hebden Road construction support site and use of Hebden Road is assessed in the EIS. Further assessment has been completed as part of the *Appendix H (Revised traffic and transport impact assessment)* of the Amendment Report in response to submission. This includes a quantitative assessment of cumulative impacts at key intersections that may occur because of the project and other major concurrent projects (such as the HCC REZ transmission project). This is presented in *section 5.3.2 (project only, construction)* and *section 7.2 (cumulative assessment)* of *Appendix H (Revised traffic and transport impact assessment)* of the Amendment Report.

For the Hebden Road/New England Highway intersection, it is acknowledged that the intersection is forecast to perform at LOS F in the weekday AM and PM peak hours in 2028 due to a small number of right turning movements (less than 3) from Hebden Road onto the New England Highway. The intersection would continue to perform at LOS F during the project construction and in the cumulative scenarios due to these future base conditions. To minimise the impacts during the

network peak hour, mitigation measure TT3 has been amended to restrict HTP construction traffic to left out turns only in the AM peak and right in turns only during the PM peak hour so as to not contribute to the delays. Variable message signs would also be implemented to communicate to road users of the potential delays at this intersection.

For the new site access to the construction support site, this intersection would be designed in accordance with the relevant Austroads guidelines (where relevant) as a basic left turn and basic right turn intersection and to accommodate the required vehicle swept paths. The strategic concept design for this intersection is provided in *Appendix D of Appendix H (Revised traffic and transport impact assessment)* of the Amendment Report. The detailed design of the intersection would occur in consultation with Muswellbrook Shire Council.

The SISD assessments have found that both intersections are SISD compliant, and no additional controls are required. The SISD assessments are provided in *Appendix B of Appendix H (Revised traffic and transport impact assessment)* of the Amendment Report.

EnergyCo acknowledge the RSA completed for the HCC REZ transmission project, and the concerns about the condition of Hebden Road. As required by mitigation measure TT1, a traffic management plan will be prepared in consultation with Muswellbrook Shire Council. This will include any required site specific traffic control measures and required road safety controls. It is acknowledged that the increase of vehicles due to HTP construction traffic on Hebden Road would have a moderate impact on pavement condition. Pre-construction road dilapidation surveys and routine inspections will be completed along all nominated construction routes on local roads (mitigation measure TT6). Where rectification works are required due to project impacts, consultation with Muswellbrook Shire Council as the relevant road authority will be undertaken to confirm the scope of the work required.

The cumulative assessment methodology considers the addition of construction traffic from future major projects and does not capture short maintenance campaigns associated with existing infrastructure. Notwithstanding, the TMP would include coordination and further consultation with ARTC to understand planned maintenance activities and the need for any additional mitigation measures.

Management and mitigation

Summary of issue

Muswellbrook Shire Council outlined the requirements for local road maintenance associated with the construction of the HTP. This included requirements for:

- dilapidation surveys: the dilapidation survey must record the condition of road pavement and drainage structures, and other road-related infrastructure
- upkeep-and-management: the principal entity is required to enter into a maintenance management plan with Muswellbrook Shire Council for the use of Hebden Road, Edderton Road, and Pikes Gully Road
- multi-project responsibility: where the project's construction overlaps with another project (e.g. the HCC REZ or scheduled ARTC works), EnergyCo must liaise with those parties to establish a clear and equitable approach to dilapidation responsibilities. This approach must then be reported (for review and agreement) to Muswellbrook Shire Council.

Muswellbrook Shire Council noted it will use the results of the initial and final dilapidation surveys to seek repairs to damaged road infrastructure but noted it lacked a mechanism to apportion damage across multiple concurrent projects.

Response

As mentioned above, dilapidation surveys will be undertaken as required by mitigation measure TT6. Local roads are likely to be more susceptible to increased traffic and heavy vehicle use given their pavements are not built as strong as higher order roads nor are their cross sections as wide. Routine inspections and maintenance will be completed along all nominated construction access routes on local roads to ensure that construction access routes, access tracks, construction support sites and temporary worker accommodation accesses are maintained to a safe standard during construction, in consultation with the relevant road authority. Damage caused by the project will be rectified during or after construction in consultation with the relevant road authority.

The updated cumulative impact assessment undertaken in *section 5.20, Chapter 5 (Assessment of impacts)* of the Amendment Report and *Chapter 7 of Appendix H (Revised traffic and transport impact assessment)* of the Amendment Report, identifies all relevant projects potential to cause cumulative traffic impacts with the HTP as they are likely to use similar construction access routes or have overlapping construction programs with these projects. As required by mitigation measure CI1, consultation with construction contractors, proponents, councils, and affected landowners will be undertaken as required to coordinate construction staging/timing with the aim of minimising and managing potential cumulative impacts. This will include identifying the potential for cumulative impacts associated with concurrent construction programs (e.g. shared access routes, work sites, resources) and developing mitigation measures to mitigate cumulative impacts as they arise.

The project will continue to liaise with Muswellbrook Shire Council concerning the construction access routes and will work with Muswellbrook Shire Council to resolve how road dilapidation would be reported and addressed. EnergyCo will also provide the results of the pre-construction dilapidation surveys and assessments once available. EnergyCo is committed to negotiating an acceptable arrangement for road impacts during construction through a third party agreement.

Summary of issue

Muswellbrook Shire Council noted that any TMP should be developed in consultation with Muswellbrook Shire Council and prior to construction of the HTP.

Response

As stated in *Chapter 11 (Traffic and transport)* of the EIS, a traffic management plan will be implemented for the project to identify requirements for minimising traffic impacts during construction (refer to *Appendix D (Updated mitigation measures)* of the Amendment Report). The traffic management plan will be prepared in consultation with Muswellbrook Shire Council, other relevant road authorities, FCNSW, affected property owners, and emergency services to identify the key management and response strategies to minimise potential delays and disruptions that may arise due to the project.

7.3.6 Social

Legacy housing and temporary worker accommodation

Summary of issue

Muswellbrook Shire Council reviewed the proposed construction support site and temporary worker accommodation at Hebden Road against Council's *Temporary Workforce Accommodation Policy* (Muswellbrook Shire Council 2025).

Muswellbrook Shire Council noted that the proposed construction support site and temporary worker accommodation at Hebden Road would be located on greenfield land zoned SP2 – Infrastructure. Muswellbrook Shire Council accepted that temporary worker accommodation is ancillary to an infrastructure project and is therefore permissible in the SP2 zone under the *State Environmental Planning Policy (Housing) 2021*.

Muswellbrook Shire Council stated, however, that the construction support site and temporary worker accommodation must also meet the expectations of Council's *Temporary Workforce Accommodation Policy* (Muswellbrook Shire Council 2025). The policy requires proponents to demonstrate clear legacy outcomes for Muswellbrook LGA.

Muswellbrook Shire Council noted that the social impact assessment describes the proposed construction support site and temporary worker accommodation as being 'relatively isolated from the broader Muswellbrook community', which is inconsistent with the preferred location criteria in Council's *Temporary Workforce Accommodation Policy*.

It was noted that Muswellbrook Shire Council and EnergyCo are working together regarding temporary worker accommodation and exploring options to deliver legacy benefits, for the local government area. Muswellbrook Shire Council understands that the temporary worker accommodation is modelled to be constructed mid-2028.

Muswellbrook Shire Council notes that if the temporary worker accommodation remains on Hebden Road, the site is adjacent the Lake Liddell Recreation Area, which offers camping and recreation (including powered and unpowered camping sites). Muswellbrook Shire Council suggests that relevant zoning and permanent-standard facilities (cabins, group accommodation, dining halls) from a temporary worker accommodation would expand tourism options and strengthen the site's long-term appeal. In consultation with the Lake Liddell Recreation Area, Muswellbrook Shire Council states that EnergyCo should demonstrate:

- a) How the built form of the temporary worker accommodation (e.g. cabins, dorms, group facilities, kitchens, dining halls, recreation spaces) can be repurposed for permanent visitor or community use
- b) That water supply and wastewater systems will be designed and constructed to permanent standards for on-site systems (tank water, septic, or similar) that are sized to meet ongoing demand for the proposed legacy use, comply with regulatory requirements and are designed and certified as permanent infrastructure.

Response

EnergyCo recognises the importance of exploring opportunities to create positive housing and economic outcomes for local communities. EnergyCo is involved in ongoing discussions with councils regarding opportunities to provide legacy housing across EnergyCo's portfolio of projects.

Muswellbrook Shire Council's *Temporary Workforce Accommodation Policy* was formally adopted by Muswellbrook Shire Council on 23 September 2025, which was near the end of the EIS exhibition period for the project. As such, since public exhibition of the EIS, EnergyCo has completed an analysis of temporary worker accommodation sites with reference to Muswellbrook Shire Council's policy. This analysis determined that the alternative sites suggested by Muswellbrook Shire Council would not meet the requirements of the HTP construction. Therefore, the temporary worker accommodation location at Hebden Road remains as the preferred location. More detailed results of this further analysis have been shared with Muswellbrook Shire Council.

The site of the construction support site and temporary worker accommodation at Hebden Road would be leased temporarily from AGL for the construction of the project (the land is not owned by EnergyCo). This means that there would not be an opportunity to repurpose the site once construction is complete. As such, the temporary worker accommodation infrastructure is not currently proposed to be designed or certified as permanent infrastructure.

The worker accommodation sites for the project are proposed to be established during early works, which is expected to occur in 2027, as outlined in the revised project description in *section A3.5, Appendix A (Updated project description)* of the Amendment Report.

Potential impacts of the Hebden Road construction support site on the Lake Liddell Recreation Area would be managed through the temporary worker accommodation management plan(s) that will be developed prior to construction in consultation with neighbours, councils, health and emergency service stakeholders as required by mitigation measure S07.

Notwithstanding, EnergyCo is committed to working with Muswellbrook Shire Council to identify opportunities for potential alternative legacy outcomes that the project could support.

Legacy housing and temporary worker accommodation for multiple projects

Summary of issue

Muswellbrook Shire Council stated that if the construction support site/temporary worker accommodation remains on Hebden Road, EnergyCo should explore and implement sharing opportunities with multiple renewable energy projects to ensure consistency with Muswellbrook Shire Council's *Temporary Workforce Accommodation Policy* (Muswellbrook Shire Council 2025). This should include:

- confirming if the current capacity of 300 workers is the optimal design
- assessing whether an expanded capacity (e.g. up to 500 workers) would better accommodate multiple projects and reduce the need for additional standalone temporary worker accommodation in the region.

Response

EnergyCo is seeking planning approval for up to 300 workers at the construction support site/ temporary worker accommodation at Hebden Road, as noted in *section 4.3.7, Chapter 4 (Project description)* of the EIS. The capacity of the construction support site/worker accommodation will be further refined by the appointed construction contractors and will be bound by the lease agreement between AGL and EnergyCo and constructed and operated in accordance with any relevant Conditions of Approval for the HTP.

Notwithstanding, EnergyCo is committed to working with Muswellbrook Shire Council to identify opportunities for potential alternative legacy outcomes including portfolio-wide opportunities.

Temporary worker accommodation management plan

Summary of issue

Muswellbrook Shire Council noted EnergyCo's commitment to developing a temporary worker accommodation management plan prior to construction of the HTP. Muswellbrook Shire Council noted that this plan would address accommodation capacity, worker conduct and wellbeing, integration with local communities, provision of health and support services, and community safety and security protocols, and would comply with the *NSW Guidelines for Construction Workers Accommodation* (DPHI 2025).

Muswellbrook Shire Council stated to encourage local spending, the temporary worker accommodation management plan must commit to the social, health, and wellbeing outcomes in Muswellbrook Shire Council's *Temporary Workforce Accommodation Policy* (Muswellbrook Shire Council 2025).

Muswellbrook Shire Council requested that the draft temporary worker accommodation management plan be provided in the Submissions Report (or sooner) for comment before approval of the HTP.

Response

EnergyCo is unable to provide a temporary worker accommodation management plan ahead of the selection of construction contractors for the HTP.

The temporary worker accommodation management plan will be prepared by the construction contractors prior to construction of the project, and in consultation with the network operator and EnergyCo. The plan will be prepared with reference to the *NSW Guidelines for Construction Workers Accommodation* (DPHI 2025) and the *Temporary Workforce Accommodation Policy* (Muswellbrook Shire Council 2025).

EnergyCo will share the temporary worker accommodation management plan at the earliest opportunity for comment from Muswellbrook Shire Council.

Community and employment benefits

Summary of issue

Muswellbrook Shire Council expressed concerns regarding the lack of detail for the proposed community and employment benefit program.

Muswellbrook Shire Council noted that EnergyCo plans to start consulting with relevant communities in 2026 to design and deliver the program in the Hunter-Central Coast region. Muswellbrook Shire Council also noted that an evaluation of the project's financial benefits for local and regional areas cannot be completed currently due to a lack of detail regarding the investment priorities and the funding quantum (amount) for the program, as stated in the EIS.

Muswellbrook Shire Council expressed concern that without clear investment priorities or a funding amount, the program cannot be properly evaluated for equity. Muswellbrook Shire Council suggested that given the project spans multiple jurisdictions with differing levels of impact, a hybrid funding model should be considered (combining a base allocation with impact-weighted adjustments) to ensure a fair and transparent framework.

Response

EnergyCo is expecting to commence consultation with relevant communities in 2026 to inform the design and delivery of the community and employment benefit program in the Hunter-Central Coast region that will ensure benefits are shared with the local communities hosting the renewable energy transition, including those hosting the HTP.

The community and employment benefit program will be developed in accordance with the *Regional Communities Consultation Guide* (NSW Premiers Department 2025) and the *Grants Administration Guide* (NSW Cabinet Office 2024).

EnergyCo will work closely with Muswellbrook Shire Council to shape the community and employment benefit program.

Impacts to local health and emergency services

Summary of issue

Muswellbrook Shire Council raised concerns regarding the impact of the project's workforce on local health and emergency services, which already have existing capacity limitations in Muswellbrook and Singleton LGAs as noted in the social impact assessment included in the EIS. Muswellbrook Shire Council noted that the influx of temporary workers, compounded by other renewable energy projects, would increase the overall local population, placing a greater strain on hospitals due to the potential for increased demand, including due to respiratory and other illnesses.

Muswellbrook Shire Council acknowledged that EnergyCo would provide first aid capacity at the construction support site/temporary worker accommodation at Hebden Road. Muswellbrook Shire Council advised to discuss a resourcing strategy with local general practitioners (including providing workforce numbers and a detailed schedule) to help them secure additional practitioners during periods of peak temporary workforce. Muswellbrook Shire Council also advised that EnergyCo enter into formal agreements with local medical centres to directly support the provision of additional

staffing capabilities in accordance with clause 4.3.5 of Muswellbrook Shire Council's *Temporary Workforce Accommodation Policy* (Muswellbrook Shire Council 2025).

Response

Section 6.4.3 of *Technical Report 6 – Social impact assessment* provided an assessment of reduced access to health and other community services due to increase in the construction workforce from construction of the project. The assessment acknowledged that workforce health needs that cannot be addressed by on-site first aid would likely result in an overflow to Muswellbrook hospital which has limited staffing and specialist capacity, as well as local medical centres, which may affect the overall capacity of these services to meet existing resident population needs. Without mitigation, the significance of increased demand to local health and community services from non-local workers was assessed as medium (negative) across the local area. With the implementation of management and mitigation measures, the residual impact was assessed as low (negative).

Since the exhibition of the EIS, DPHI released the revised *Social impact assessment Guideline for State Significant Projects* (revised SIA Guideline). A revised significance matrix was included in the revised SIA Guideline. The impact ratings for reduced access to health and other community services due to increase in the construction workforce were reviewed against the revised significance matrix and the rating before mitigation changed from medium (negative) to low (negative) for both the corridor and local area with the residual impact remaining the same for both the corridor and local area (low (negative)) (refer to *section 5.8, Chapter 5 (Assessment of impacts)* and *Appendix I (Social impact assessment addendum)* of the Amendment Report.

This risk would primarily be managed by implementation of mitigation measure S07, which requires temporary worker accommodation management plan(s) to be developed prior to construction and address health and emergency service requirements. The temporary worker accommodation management plan(s) will be informed by consultation with health and emergency service stakeholders as well as with councils, including Muswellbrook Shire Council. The plan will include provision for dedicated health and paramedic services to assist in reducing demand on health care services by the project workforce in the region. Muswellbrook Shire Council's *Temporary Workforce Accommodation Policy* (Muswellbrook Shire Council 2025) will also be considered in the preparation of the temporary worker accommodation management plan(s).

Disruption to social and commercial services during construction

Summary of issue

Muswellbrook Shire Council noted that some construction workers may need short-term local accommodation before temporary worker housing is established on-site. This is expected to occur during pre-construction minor works and early works. Muswellbrook Shire Council stated that there is currently limited capacity for temporary worker accommodation in Muswellbrook. Muswellbrook Shire Council also noted that this situation is expected to worsen with other construction projects starting in the area. Muswellbrook Shire Council requested information on the likely number of workers to be housed in the short-term.

Response

Section 23.3.1, Chapter 23 (Cumulative impacts) of the EIS acknowledges that concurrent construction programs for major projects in the Muswellbrook LGA have the potential to cause excess demand for short and long-term accommodation and housing. Peak demand for housing and accommodation is anticipated to occur in 2027 and has the potential to displace community members such as seasonal workers that depend on access to short-term housing and accommodation. Cumulative impacts associated with accommodation and labour demand will be managed in accordance with the social impact management plan and HTP Community and Stakeholder Engagement Plan.

The inclusion of temporary worker accommodation in the project has also been proposed to mitigate the risk that the project may increase competition for labour and housing in the region. However, some workers may be required to be housed in short-term accommodation locally prior to the establishment of temporary worker accommodation within construction support sites.

Community social benefits

Summary of issue

Muswellbrook Shire Council provided positive feedback regarding the project's social and employment commitments.

Muswellbrook Shire Council acknowledged the commitment to partner with local organisations to implement employment and training programs for disadvantaged people, including TAFE NSW which is developing a new education precinct in Cessnock. Muswellbrook Shire Council encouraged EnergyCo to target Aboriginal and Torres Strait Islander people and youth for these opportunities and to employ apprentices from these groups to minimise the reliance on outside workers.

Muswellbrook Shire Council was pleased with EnergyCo's plan to hold events for Aboriginal and local businesses to explore project opportunities. It welcomed consultation with local business representatives, including Traditional Owners and Local Aboriginal Business representatives, and encouraged the Muswellbrook and Denman Chambers of Commerce and the Sandy Hollow Progress Association to be included in this consultation.

Muswellbrook Shire Council was satisfied with the commitment to develop an Industry and Aboriginal Participation Plan. It also noted and supported the commitment to source 2.5 per cent of local goods and services from Aboriginal businesses, with a stretch goal of 10 per cent.

Response

Muswellbrook Shire Council's support for the social and employment commitments for the project is acknowledged, including the focus on providing opportunities for local and Aboriginal businesses and people to be employed.

7.3.7 Other matters

Economic – impacts to local housing market during construction

Summary of issue

Muswellbrook Shire Council expressed concern about the risks to the local housing market posed by worker accommodation.

Muswellbrook Shire Council noted that the economic impact assessment identified that any residual housing price impacts will depend on the balance of the workforce source (local, non-local, DIDO/FIFO), the extent of temporary worker accommodation provision, and the ability of the overall housing supply to adjust to demand.

Muswellbrook Shire Council reported community concerns about the risk of oversupply of accommodation and below-market pricing arising from temporary worker accommodation proposals, which could distort the local housing market. This feedback was provided during the community consultation for Council's *Temporary Workforce Accommodation Policy* (Muswellbrook Shire Council 2025). The policy requires proposals to consider potential adverse market impacts, including oversupply and below-market pricing and forecast regional changes in/surrounding Muswellbrook.

Muswellbrook Shire Council stated that an economic impact assessment is required if these risks are identified to ensure that temporary worker accommodation is appropriately scaled to demand, aligns with long-term population needs, and does not contribute to housing oversupply or underutilised infrastructure, thereby protecting existing permanent or visitor accommodation providers.

Response

EnergyCo acknowledges Council's concerns in relation to impacts on the local housing market.

Section 22.4.3, Chapter 22 (Other matters) of the EIS acknowledges that major construction projects can place short-term pressure on local housing and community infrastructure where temporary workforces rely on existing accommodation. *Section 6.4.2 of Technical Report 6 – Social impact assessment* of the EIS outlines that the project's proposed housing and accommodation management measures substantively reduce the risk of diminished access to housing and short-term accommodation for other uses during the construction period. This conclusion is consistent with the revised assessment in *Appendix I (Social impact assessment addendum)* of the Amendment Report.

Accommodation for the peak construction workforce would be largely self-contained, with facilities designed to meet temporary demand without drawing on permanent rental or visitor housing in Muswellbrook Shire or neighbouring LGAs.

The project's approach to use dedicated temporary accommodation rather than relying on local housing is consistent with Muswellbrook Shire Council's policy objectives to prevent oversupply, below-market pricing and long-term underutilised infrastructure.

In accordance with mitigation measure S07, a temporary worker accommodation management plan(s) will be prepared in consultation with local councils and will include a contemporary analysis of short-term and local accommodation capacity in key localities including Muswellbrook LGA. It will also be revised on a six-monthly basis to monitor the effectiveness of the commitments and to address any emerging or unanticipated impacts.

Waste management – general waste management

Summary of issue

Muswellbrook Shire Council outlined requirements and additional information required regarding the project's waste management and material handling.

Muswellbrook Shire Council outlined the requirement for a resource recovery and materials management plan to be prepared in consultation with Muswellbrook Shire Council's Waste Operations Unit. Muswellbrook Shire Council noted that this plan should include anticipated volumes and classifications, proposed processing or disposal methods, and an estimated timeline for material receipt.

Muswellbrook Shire Council listed the types of waste that can and cannot be accepted at the Council-run Muswellbrook Waste and Recycling Facility. Muswellbrook Shire Council noted that for any Virgin Excavated New Material (VENM) or Excavated New Material (ENM), Muswellbrook Shire Council requires EnergyCo to undertake waste classification following the NSW EPA Guidelines.

Response

EnergyCo notes Muswellbrook Shire Council's comments regarding waste management, material handling and the use of the Muswellbrook Waste and Recycling Facility. The EIS identifies the Muswellbrook Waste and Recycling Facility (Coal Road, Muswellbrook) as one of the existing licensed facilities near the project impact area.

Section 22.3.5, Chapter 22 (Other matters) of the EIS outlines mitigation measures in relation to waste management. Mitigation measure WM1 requires the implementation of a waste management and resource recovery plan for the project. As stated in the EIS, the confirmation of recycling and disposal facilities to be used during construction and operation will be determined in consultation with local councils and will be based on availability/capacity of these facilities and the waste licenced to be accepted (mitigation measure WM2). All waste generated by the project will be assessed, classified, managed and disposed of in line with the EPA *Waste Classification Guidelines Part 1: Classifying waste* (NSW EPA, 2014) and the *Protection of the Environment Operations (Waste) Regulation 2014*.

Indicative waste types and quantities are provided in the EIS and are based on the current design and indicative construction methodology as well as experience on similar projects. These estimates will be refined through the waste management and resource recovery plan as design and construction methods are finalised, and will inform the discussions with Muswellbrook Shire Council in accordance with mitigation measure WM2.

Waste management – recycled materials

Summary of issue

Muswellbrook Shire Council provided feedback regarding the project's use of recycled materials and the need for targets for recycled material use and detailed recycling plans.

Muswellbrook Shire Council highlighted opportunities to use recycled materials in the project (e.g. recycled steel for towers, recycled aggregates/cement substitutes in concrete, recycled aluminium in conductors, and recycled plastics/composites in insulators and access tracks). Muswellbrook Shire Council noted that the current approach relies on virgin materials and lacks specific targets for recycled material use in the construction of the HTP. Muswellbrook Shire Council stated that this undermines the environmental goals of the energy transition, referencing that other agencies have minimum recycled material inclusion standards. Muswellbrook Shire Council requested that this be addressed in the Submissions Report.

Muswellbrook Shire Council requested information on the specific facilities where recycling would occur and demonstration that those facilities have the capacity to handle the additional material generated from the project. Muswellbrook Shire Council noted that this information should be included in the waste management plan (or resource recovery and materials management plan) for the HTP.

Response

EnergyCo notes Muswellbrook Shire Council's feedback regarding the use of recycled materials and the need for clear targets for resource recovery.

As outlined in *section 22.3, Chapter 22 (Other matters)* of the EIS, waste generated during construction and operation of the project would be managed in accordance with the waste hierarchy of avoid, reduce, reuse and recycle before disposal. The project will prepare a waste management and resource recovery plan prior to construction (see mitigation measure WM1). This plan will identify opportunities to incorporate recycled and low-impact materials, such as recycled aggregates, steel and fencing products, into procurement and construction activities, consistent with NSW Government circular economy policies.

The waste management and resource recovery plan will also identify recycling and disposal facilities licensed to receive project waste, with consultation to be undertaken with relevant councils and facility operators during detailed design (mitigation measure WM2).

As discussed above, the type and approximate volume of waste streams in the EIS will be refined as the design and construction methods are finalised. These estimates will inform discussions with Muswellbrook Shire Council concerning recycling and disposal facilities in accordance with mitigation measure WM2.

While the EIS commits to applying circular economy principles and the waste hierarchy, it does not specify minimum recycled content targets for construction materials or identify the exact facilities where recycling would occur. These details will be developed through the waste management and resource recovery plan in consultation with the NSW EPA and relevant councils.

7.3.8 Cumulative impacts

Impact assessment approach

Summary of issue

Muswellbrook Shire Council noted an omission in *Technical Report 19 – Economic impact assessment*. Specifically, the list of cumulative projects did not include the Muswellbrook Bypass. Muswellbrook Shire Council requested that the Muswellbrook Bypass be added to the assessment, as its construction is expected to begin in late 2027.

Response

EnergyCo acknowledges Muswellbrook Shire Council's comment regarding the omission of Muswellbrook Bypass from the list of cumulative projects considered in the EIS. Muswellbrook Bypass has now been added to the list of relevant future projects with the potential for cumulative impacts alongside HTP. Updated information on relevant cumulative projects, including the Muswellbrook Bypass, is included in *section 5.20, Chapter 5 (Assessment of impacts)* of the Amendment Report.

7.4 Singleton Council

7.4.1 Project description (construction)

Workforce accommodation

Summary of issue

Singleton Council acknowledged the proposal for a construction support site/temporary worker accommodation at Gouldsville Road.

Council identified several conflicts between the proposed worker accommodation at Gouldsville Road and Council's *Draft Construction Workers Accommodation Policy (2025)*. These conflicts included:

a. Site location and suitability:

- flooding: Council policy preference is for sites 'not located on the floodplain'. The EIS identifies the site as being 'affected by local catchment flooding' (inundation expected at 10 per cent Annual Exceedance Probability, AEP). Singleton Council requested a detailed flood risk management strategy specific to the worker accommodation, demonstrating protection for personnel and assets, consistent with Singleton Council's *Floodplain Risk Management Study and Plan (2023)*
- zoning: Council policy preference is for locations within existing Strategic Growth Areas, preferably residential zones (R1/R2). The EIS identifies the site is zoned RU1 – Primary Production. Singleton Council requested justification for selecting the RU1 site over preferred residential zones and an explanation of how this aligns with long-term land-use objectives, despite the project's CSSI status

b. Infrastructure provision and servicing:

- water and wastewater: Singleton Council policy preference is for the extension of existing reticulated sewer/servicing to prevent isolated and costly arrangements. The EIS states that the facility will be 'fully self-contained', with wastewater (including sewage) transported offsite by a licensed contractor. Singleton Council requested a detailed water/sewer servicing strategy consistent with Singleton Council's adopted Engineering Standards and discussions with Singleton Council's Manager Water and Sewer to confirm the long-term implications and costs associated with the servicing model
- 'wet mess' facilities: Singleton Council policy states it 'will not accept an application that includes a wet mess' as it would discourage workers from using local hospitality. The EIS mentions food facilities but does not explicitly clarify the type. Singleton Council requested confirmation that food and catering services will operate as a 'dry mess' in accordance with the policy, maximising local economic benefits.

c. Long-term legacy and community integration:

- repurposing: Singleton Council's policy states that the worker accommodation should provide a 'long-term legacy' by being repurposed (e.g. for short term rentals, essential workers, crisis housing etc) after construction ends. The EIS states that 'the future use of temporary worker accommodation following completion of construction is outside the scope of the EIS'. Singleton Council requested EnergyCo to engage on potential repurposing plans for the worker accommodation at Gouldsville Road or to identify other possible locations for the worker accommodation to address local housing gaps and to align with Singleton Council's *Draft Construction Workers Accommodation Policy (2025)* and the *Singelton Local Housing Strategy 2041 (2024)*
- community services: Singleton Council policy aims for 'no net impact' to existing services and encourages the use of available local services. The EIS proposes self-contained facilities to 'minimise reliance' on surrounding health and social infrastructure. Singleton Council requested further detail on how workers would be encouraged to engage with local businesses, health, education, and sports services to ensure community integration and support.

d. Noise impacts and worker conduct:

- out of hours noise: Singleton Council expressed concerns related to noise from the worker accommodation. Singleton Council noted that the out of hours operation of the temporary worker accommodation at Gouldsville Road would exceed the sleep disturbance screening level at nearby residential receivers in Singleton LGA. Singleton Council requested further detailed mitigation measures beyond general protocols to specifically address these noise impacts, particularly for the closest residences
- code of conduct: Singleton Council acknowledged the commitment to a 'code of conduct' for workers' and expects this code to be rigorously enforced, with a zero tolerance policy for anti-social behaviour.

e. Ongoing consultation and coordination: Singleton Council welcomed the commitment to develop 'temporary worker accommodation management plan(s)' prior to construction, informed by consultation with councils and other stakeholders. Singleton Council requested that the final management plan incorporate the principles and requirements outlined in Singleton Council's *Draft*

Construction Workers Accommodation Policy (2025) and DPHI's *Guidelines for Construction Workers Accommodation (2025)*. Singleton Council noted that it expects continued consultation during detailed design and prior to construction with its Planning, Infrastructure, Water and Sewer, and Biosecurity Officers.

Response

Following further construction planning and engagement with the prospective design and construct contractors, EnergyCo has removed the proposed temporary worker accommodation from the Gouldsville Road construction support site. This update on the project has been shared with Singleton Council and described in *Appendix A (Updated project description)* of the Amendment Report.

7.4.2 Engagement

Future community and stakeholder engagement

Summary of issue

Singleton Council acknowledged the four project briefings regarding traffic and transport impacts held between June 2024 and June 2025. Singleton Council requested ongoing structured engagement, specifically requiring technical-level workshops with Singleton Council. It was noted that these workshops should focus on technical details such as traffic management plans, haulage routes, and road condition monitoring.

Response

EnergyCo's HTP Community and Engagement team, supported by the project team and technical specialists, met with Singleton Council late 2025 and early 2026 to discuss the traffic management matters raised during exhibition. In line with the project's traffic and transport mitigation measures, EnergyCo will continue to consult with the relevant road authorities, including Singleton Council, on traffic and road-related matters as updated information becomes available.

A forward engagement schedule will be developed and provided to Singleton Council. It is anticipated that EnergyCo will meet with Council at least twice during upcoming phases as technical information is refined. Engagement will be coordinated over the course of the project through the HTP Community and Engagement team, with technical participation included and involvement by the network operator and Design and Construct Contractor(s) where required.

7.4.3 Biodiversity

Management and mitigation

Summary of issue

Singleton Council highlighted that the project is a controlled action under the EPBC Act due to impacts on threatened species, ecological communities and Commonwealth land (Singleton Military Area – SMA).

Singleton Council noted the scale of direct impacts:

- native vegetation clearing: construction would result in direct impacts to approximately 762 hectares of native vegetation, with 546 hectares cleared
- threatened ecological communities (TECs): direct impacts affect seven BC Act listed TECs, totalling around 207 hectares. The largest impact is on the Central Hunter Grey Box-Ironbark Woodland (142 hectares)
- threatened species in the SMA: the SMA is crucial habitat for the critically endangered Regent Honeyeater and Swift Parrot. Ecological surveys recorded 18 threatened fauna species and predicted 123 more within the SMA.

Singleton Council acknowledged efforts to refine the project to avoid SAI species like the Brush-tailed Rock-Wallaby and Sooty Owl.

Singleton Council noted that the LGA's biodiversity landscape is fragmented and referenced its adopted *Biodiversity Conservation Policy* (2023) and *Rural Lands Strategy* (2025).

Singleton Council sought strong assurances regarding:

- offsets: assurance biodiversity offsets would be addressed via the SODA
- mitigation: the implementation of a comprehensive biodiversity management plan and a connectivity strategy to mitigate habitat fragmentation and protect threatened species.

Singleton Council also sought ongoing and collaborative engagement with DCCEEW and EnergyCo on biodiversity opportunities that align with Singleton Council's adopted strategic outcomes.

Response

EnergyCo notes the comments made by Singleton Council regarding the biodiversity impacts of the project and the efforts made to avoid SAI species.

A biodiversity management plan (BMP) (mitigation measure B1) and connectivity strategy (mitigation measure B5) will be developed and implemented to guide the management and evaluation of mitigation measures. Suitably qualified and experienced biodiversity experts will prepare the BMP, in consultation with relevant government agencies, including CPHR, NPWS, FCNSW and the Australian Government DCCEEW. Refer to *Appendix D (Updated mitigation measures)* of the Amendment Report for further details.

The estimated biodiversity credit liability requirements for the project have been determined in accordance with the NSW Biodiversity Offsets Scheme for the project. EnergyCo will enter into a SODA with the Secretary of NSW DCCEEW for the project. Under this agreement, responsibility for delivering biodiversity offsets will be transferred to the Department with commensurate funding.

EnergyCo will continue to engage with Singleton Council on the project, including in relation to biodiversity opportunities that align with Singleton Council's strategic outcomes where relevant.

7.4.4 Aboriginal heritage

Management and mitigation

Summary of issue

Singleton Council noted that the Aboriginal cultural heritage assessment highlighted the rich and complex cultural landscapes within the Singleton LGA.

Singleton Council noted that 32 discrete Aboriginal sites (including artefact scatters, grinding grooves, and rock shelters) have been identified within the project impact area of the HTP.

Singleton Council expressed concerns over:

- direct impacts: around 14 of the 32 identified sites are likely to face direct impacts, resulting in their complete or partial loss
- cumulative disturbance: the area has a history of disturbance due to mining, meaning the cumulative impacts of disturbance on local and State-significant Aboriginal heritage are significant.

Singleton Council acknowledged EnergyCo's commitment to avoiding direct impacts on high significance sites and noted the refinements made to avoid a culturally modified scar tree near HVO South and minimise disturbance to the Warkworth sand system.

Singleton Council stressed the need for continued, meaningful engagement with Registered Aboriginal Parties (RAPs) and the need to develop an Aboriginal cultural heritage management plan, prior to construction of the HTP. The Aboriginal cultural heritage management plan must ensure the proper management of archaeological mitigation, the handling of unexpected discoveries, and the protection of broader cultural landscape values, including cultural view lines.

Response

EnergyCo acknowledges concerns over direct impacts to identified sites and the need for continued and meaningful engagement with RAPs to inform the development of an Aboriginal cultural heritage management plan. As per mitigation measure AH01 and revised AH02 an Aboriginal cultural heritage management plan will be developed by a heritage specialist in consultation with the RAPs to provide the post-approval framework for managing archaeological mitigation and Aboriginal heritage (including cultural lands values and view lines) within, and within 55 metres of, the project impact area (refer to *Appendix D (Updated mitigation measures)* in the Amendment Report). The Aboriginal cultural heritage management plan will contain procedures for managing the unexpected discovery of Aboriginal objects, sites and/or human ancestral remains during the project. Furthermore, where possible, the clearing of vegetation between significant cultural viewing locations and the project impact area will be minimised in discussion with Awabakal Traditional Owners (see revised mitigation measure AH07). Consultation with Awabakal Traditional Owners will also involve where practicable positioning project elements to maximise the distance from and/or minimise their visibility within culturally important view-lines.

7.4.5 Landscape and visual

Management and mitigation

Summary of issue

Singleton Council noted:

- moderate daytime construction and operational impacts are predicted in Landscape Character Zone (LCZ) 7 (Wollombi Brook rural valley)
- potential high to moderate visual impacts for several private dwellings in areas such as Maison Dieu, Long Point, Broke, and Mount Thorley.

Singleton Council acknowledged EnergyCo's efforts to refine the project to reduce visual impacts on communities, including Broke.

Singleton Council expects the landscape character and visual impact management plan to include measures, such as vegetation screening, sensitive lighting design, and tailored screening options for directly affected private properties. These measures should include those to protect visual landscapes during construction, especially where sight lines intersect high-value landscapes.

Response

A landscape character and visual impact assessment management plan will be prepared in accordance with mitigation measure LV1 which will consider the need for vegetation screening and other impacts to minimise impacts to views during construction and operation. Further, the following mitigation measures have been identified:

- lighting at construction support sites will be designed and operated in accordance with *AS 4282 2019 Control of the obtrusive effects of outdoor lighting* (mitigation measure LV3)
- vegetation screening at private properties assessed as having a moderate or higher impact (mitigation measure LV4)
- opportunities will be investigated to reduce the height of the transmission towers visible from dwellings with a moderate visual impact in the vicinity of Cessnock Road, Broke (mitigation measure LV5)
- measures to protect culturally important viewlines including clearing vegetation and positioning of project elements to minimise their visibility will be managed through mitigation measures AH07 and AH08, respectively.

7.4.6 Traffic and transport

Impacts to existing road infrastructure

Summary of issue

Singleton Council expressed concern regarding road safety and the management of stringing works during construction of the HTP.

Singleton Council noted that stringing works would be undertaken across Putty Road and Cessnock Road and that traffic stoppages would be limited to five to 10 minutes, not exceeding six times per

day. Council requested assurance that these stringing works would be scheduled outside of peak mine shift-change periods to prevent traffic disruption.

Singleton Council stated that for key local roads, such as Lemington Road and Gouldsville Road, traffic control measures should be developed through consultation involving HVO, Singleton Council, and local residents. Singleton Council highlighted that this consultation would be necessary to ensure continued safe access for rural properties and emergency services.

Response

Assessment of stringing of transmission lines across roads was undertaken in the EIS and is documented in *section 5.3.5 of Appendix H (Revised traffic and transport impact assessment)* of the Amendment Report. At locations where the new transmission line would cross the road network, a drone or helicopter would typically then be used to take a lead wire over the road/rail/watercourse to allow cables to then be pulled and strung to each tower within the stringing section. Hurdles (including net and rope) and cranes would also be used as required in stringing activities for road and rail crossings.

The new transmission line would cross the road network in various locations throughout the project impact area, including the State road network at Putty Road east of Broke Road, and regional roads such as Cessnock Road east of Broke and Wollombi Road west of Millfield. During stringing work over roads, traffic management would typically be required with specific arrangements to be confirmed during detailed design in consultation with the relevant road authority and subject to the requirements of a road occupancy licence. This may entail short-term road closure, implementing localised traffic controls (stop/go), and/or a reduction in speed limit.

Road Occupancy Licence(s) would be sought for all temporary lane or road closures (as required). Any road closures that would result in a substantial impact (e.g. short-term full road closure and/or long-term temporary lane/road closures) would be assessed on a case-by-case basis, and approval would be sought from the relevant road authority and in consultation with emergency services, landowners and other relevant stakeholders. Where feasible, temporary lane closures would be planned outside of the traffic peak periods to minimise impact on the road network.

The locations where stringing over roads is detailed in *section 11.3.1, Chapter 11 (Traffic and transport)* of the EIS. Traffic control measures would be implemented during stringing works across these roads as well as local roads (such as Lemington Road and Gouldsville Road). These controls will be detailed in the traffic management plan (mitigation measure TT1), which will be developed in consultation with the relevant road authorities (such as Singleton Council). Further, as provided in the mitigation measures, HVO will be consulted during detailed design and construction on the construction methodologies and activities underway in the vicinity of its operations. This includes coordination with HVO to minimise adverse impacts on the road network.

Summary of issue

Singleton Council stated the following regarding upgrades, dilapidation and maintenance of local roads:

- any necessary local or regional road upgrades associated with the project must have their timing, design standards, and funding responsibilities clearly defined and agreed upon before construction starts

- all roads within the Singleton LGA proposed for project construction traffic must be subject to comprehensive pre- and post-construction dilapidation surveys
- EnergyCo must be responsible for funding appropriate remediation works where construction traffic causes accelerated deterioration of roads.

Response

The scope and location of road and intersection upgrades have been provided in the revised project description (*section A3.5, Appendix A (Updated project description)* of the Amendment Report and *section 5.3.12 of Appendix H (Revised traffic and transport impact assessment)* of the Amendment Report. Strategic concept designs for the intersection upgrades have been provided in *Appendix D of Appendix H (Revised traffic and transport impact assessment)* of the Amendment Report. The detailed design of the intersection upgrades would be informed by ongoing consultation with the Singleton Council as the relevant road authority. The specific milestones for the completion of these upgrades would depend on the appointed construction contractor's detailed construction program and construction staging plan. However, the works would be completed prior to the use of the relevant intersection by construction vehicles associated with the main construction works.

Road or intersection upgrades and the pre-construction road dilapidation surveys and routine inspections as required by mitigation measure TT6 during construction will be completed at no cost to Singleton Council. Any required rectification works for local roads in the Singleton LGA during or following construction would be determined in consultation with Singleton Council as the relevant road authority (mitigation measure TT6) at no cost to Singleton Council and approvals obtained in accordance with the *Roads Act* (when required).

Regional roads have been built to accommodate medium to high volumes of traffic. The increase in vehicles due to construction traffic would have a negligible to minor impact on pavement condition, and dilapidation surveys and routine inspections of regional roads is not proposed.

Oversized and overmass vehicle movements

Summary of issue

Singleton Council noted that the traffic and transport impact assessment identified OSOM movements travelling through Singleton and along the New England Highway. Singleton Council also noted that the assessment relied on the completion of the Singleton Bypass to effectively avoid high-risk pinch points in the town.

Singleton Council strongly supported this approach and required confirmation that OSOM movements would not be scheduled through Singleton's CBD prior to the bypass becoming operational.

Response

As identified in *section 11.3.1, Chapter 11 (Traffic and transport)* of the EIS, there would be five proposed OSOM movements through the Singleton LGA travelling to Bayswater South switching station.

Singleton Bypass is expected to be completed and open to traffic in late 2026, which is before commencement of HTP main construction in 2027. OSOM movements to the Bayswater South switching station do rely on the opening of the Singleton Bypass. In the event that the bypass is not

open and OSOM movements have become critical, EnergyCo will consult with the relevant road authorities and complete the necessary assessments at that time.

7.4.7 Land use and property

Direct property impacts – construction

Summary of issue

Singleton Council stated that the project impact area within the Singleton LGA primarily involved land zoned RU1 – Primary Production, along with SP2 – Infrastructure (Bayswater Power Station) and SP2 – Defence (Singleton Military Area).

Singleton Council also noted with respect to:

- private land: there are 125 private freehold landholdings within the project impact area. Singleton Council acknowledged that seven private landowners had requested whole property acquisitions. The project would require temporary construction leases and permanent acquisition of freehold land for infrastructure, which placed restrictions on land use within these easements
- Defence land: there is approximately 245 hectares of the Singleton Military Area (SMA) within the project impact area leading to impacts during construction and necessitating the establishment of an 85-hectare permanent easement and 25 hectares of access tracks during operation, thereby placing restrictions on land use in the SMA
- other land: Crown land (35 hectares) and Travelling Stock Reserves (TSRs) (less than two hectares) would be impacted, necessitating ongoing consultation with NSW Local Land Services.

Singleton Council requested to continue to work collaboratively with EnergyCo to ensure that the above-noted impacts are managed effectively and that the long-term sustainability and character of the land and properties are protected throughout the project's lifecycle.

Response

EnergyCo acknowledges that the project would result in temporary and permanent impacts to land use and property. This includes easement acquisition for the transmission easement, land acquisition for permanent electrical infrastructure (such as new switching stations) and temporary leasing for areas not permanently required for the project. These potential impacts are assessed in *Chapter 12 (Land use and property)* of the EIS.

Temporary areas would be established and appropriately reinstated back to pre-construction condition where practical, or as agreed in consultation with the relevant landowner and documented in property management plans (mitigation measure LP10).

Permitted activities within easements would depend on the nature or scale of the activity, as well as proximity to the transmission line and towers. The following activities would generally be permitted within the transmission easements, however, may be subject to certain restrictions for safety and operational reasons as outlined in the *EnergyCo Living and working near easements fact sheet* (EnergyCo 2022):

- agriculture and grazing
- landscaping and paving

- drainage installation
- water and sewage infrastructure
- movement of vehicles and machinery and parking of light vehicles.

The position of the transmission line alignment within the SMA was selected by the Site Selection Board of the Department of Defence. The selection of the alignment in the SMA considered the constraints and ongoing use of the SMA. Amendment in the alignment of the HTP corridor has resulted in a slight decrease in the land required for the establishment of a permanent easement in the SMA (refer to *section 5.6.3, Chapter 5 (Assessment of impacts)* of the Amendment report). No changes in the requirements for whole property acquisition for private landowners are required associated with localised easement widening.

EnergyCo acknowledges impacts to TSRs and Crown Land during construction and operation of the HTP and notes that consultation with the NSW Local Land Services would continue to be undertaken during detailed design to confirm any permanent impacts. As stated in *section 5.6.3* of the Amendment report, one hectare of TSRs would overlap with the proposed transmission line easement and transmission towers (as opposed to two hectares in the exhibited project).

Property management plans would be entered into with landowners, which will include measures to minimise disruption during construction to existing land uses, the required adjustments to property infrastructure, and the process for the rehabilitation and stabilisation of disturbed areas following the completion of construction (mitigation measure LP2).

The design of the project would continue to be refined to minimise potential impacts on existing land use and properties as far as practicable (mitigation measure LP1). The network operator and construction contractors will continue to consult with Singleton Council as the detailed design progresses.

7.4.8 Agriculture

Impacts to agricultural practices – operation

Summary of issue

Singleton Council expressed concern that approximately 98 per cent of the agricultural lands intersecting the project impact area are located within the Singleton LGA.

Singleton Council noted that livestock grazing is the predominant activity (91 per cent of use), but the LGA was also renowned for its viticultural and equine industries, with the gross value of agriculture estimated at \$48.4 million in 2021.

Singleton Council stated that while the majority of the impacted agricultural land (76 per cent) was identified as lower capability, a small but important eight per cent was high capability land, primarily along the Hunter River. This included 213 hectares of mapped biophysical strategic agricultural land (BSAL).

Singleton Council noted that construction activities carried a risk of increasing biosecurity risks to farms, which would require a robust management plan. It was also noted that potential impacts to aerial agricultural activities require consultation and compensation for affected landholders.

Singleton Council sought assurances that impacts to individual properties would be comprehensively managed through property management plans and that long-term agricultural productivity would be protected.

Response

EnergyCo acknowledges concerns made with respect to impacts to agricultural operations associated with operation of the HTP. During project development, the HTP corridor prioritised the avoidance of impacts sensitive land uses including agriculture enterprises, BSAL, and vineyards.

The HTP corridor has been amended in response to feedback from directly impacted landowners, which has reduced the hectares of BSAL impacted by the project impact area from 213 hectares (or nine per cent of the project impact area) to around 190 hectares of BSAL (eight per cent of the project impact area). This also includes a reduction in the high capability agricultural land to 160 hectares in the amended project impact area compared to 182 hectares for the exhibited project (see *section 5.7.3, Chapter 5 (Assessment of impacts)* of the Amendment report).

Additionally, the amended project minimises impacts to high value agricultural land by minimising a severance effect that the EIS alignment was considered to have on the land, thereby maximising the available area of contiguous productive land.

A number of mitigation measures will be implemented to mitigate the impact to agricultural land, including BSAL (refer to *Appendix D (Updated mitigation measures)* in the Amendment Report). These include:

- ongoing consultation with impacted agricultural landowners to better understand impacts to agricultural operations and to inform the support to be provided to landowners (mitigation measure AG1)
- stabilisation and appropriate reinstatement of disturbed areas to their previous condition and use as soon as feasible and reasonable following the completion of construction and in consultation with the landowner (mitigation measure AG2)
- temporary areas would be established and appropriately reinstated back to pre-construction condition where practical, or as agreed in consultation with the relevant landowner and documented in property management plans (mitigation measure LP10)
- a rehabilitation management plan (RMP) (mitigation measure SL3). The RMP will detail all aspects of returning construction areas to a safe, stable (low erosion potential) and non-polluting landform consistent with surrounding terrain and land uses. This plan would also include trigger an action response plan to address erosion and soil risks during rehabilitation
- erosion and sediment control measures will be put in place for regionally mapped BSAL to minimise impacts until rehabilitation objectives for BSAL detailed in the RMP are achieved (mitigation measure SL5).

The rehabilitation of BSAL will be undertaken in consultation with relevant landowners such that good soil management practices are implemented by the contractor to facilitate the return of areas following construction.

Biosecurity risks and assessment of impacts associated with the movement of construction vehicles, earthwork, and routine maintenance activities during construction and operation of the HTP are detailed in *section 13.3.5* and *section 13.4.4, Chapter 13 (Agriculture)* of the EIS respectively. A

biosecurity management plan will be prepared in consultation with landowners and relevant local council biosecurity officers in relation to the location of high biosecurity risk areas including risks specific to vineyards (refer to mitigation measure AG3 in *Appendix D (Updated mitigation measures)* in the Amendment Report). Controls will be agreed with affected landowners and will be consistent with property-specific biosecurity plans where they are in place. During operation, biosecurity will be managed as per the network operator's EMS (refer to mitigation measure AG4).

EnergyCo acknowledge that construction activities and the location of permanent infrastructure may have an impact on grazing activities and a longer-term impact on cultivation, sowing and spraying travel patterns where the use of wide farming equipment is required or where aerial application is used. Property management plans, developed in consultation with affected landowners, will minimise impacts to agricultural operations as far as practicable (refer to mitigation measure LP2 in *Appendix D (Updated mitigation measures)* in the Amendment Report). Property management plans will include measures to accommodate existing agricultural activities during construction as well as required adjustments to grazing or cropping activities because of the location of permanent infrastructure within agricultural land. This would be informed by ongoing consultation with landowners.

The property management plans will also contain a process for the rectification of any damage to property infrastructure caused by construction and contact details for the person who will liaise with landowners to provide direct avenues of enquiry for information and issues management. Permanent impacts to agricultural operations are included in the compensation calculations under the *NSW Land Acquisition (Just Terms Compensation) Act 1991*. Landowners directly hosting transmission lines are entitled to receive Strategic Benefit Payments which are provided in addition to compensation that has been assessed under the *Land Acquisition (Just Terms Compensation) Act 1991*.

7.4.9 Social

Community benefits

Summary of issue

Singleton Council expressed dissatisfaction with the lack of detail regarding a community benefits scheme in the EIS.

Singleton Council noted that there is a lack of detail on the proposed framework for benefits, the governance structure, and the timing for when these benefits would be provided and delivered. Singleton Council considered that delaying discussion regarding community benefits (to potentially a post approval environment) would result in commencement of impacts and lost benefits to communities directly affected by the hosting of the HTP.

Singleton Council noted that it has established policy frameworks that set the minimum expectation for community benefits for development within the LGA:

- *Planning Agreements Policy* (2023): sets a minimum 1.5 per cent of Capital Investment Value for the negotiation of Planning Agreements within the LGA

- *Singleton Local Infrastructure Contributions Plan (2025)*: applies a one per cent of Capital Investment Value rate (though Council notes statutory planning provisions for contributions do not apply to State significant infrastructure like the HTP).

Singleton Council encouraged that discussions with EnergyCo start as soon as possible regarding the above.

Singleton Council stated that it requires a response to its enquiries regarding community benefits, how the project intends to meet Singleton Council's adopted policy framework, or otherwise, and transparently provide both Singleton Council and the community with adequate time to assess and determine the impacts and consequences of any proposed benefit, program or scheme across the three impacted LGAs.

Response

EnergyCo is expecting to commence consultation with relevant communities in 2026 to inform the design and delivery of the community and employment benefit program in the Hunter-Central Coast region that will ensure benefits are shared with the local communities hosting the renewable energy transition, including those hosting the HTP.

The community and employment benefit program will be developed in accordance with the *Regional Communities Consultation Guide* (NSW Premiers Department 2025) and the *Grants Administration Guide* (NSW Cabinet Office 2024)

EnergyCo will work closely with Singleton Council to shape the community and employment benefit program for the local government area.

Social – Management and mitigation

Summary of issue

Singleton Council noted the social impact assessment assessed several construction impacts as medium significance after mitigation, including:

- a perceived lack of influence over decisions and concerns about transparency
- land use changes and potential loss or relocation for landowners
- temporary changes to residential amenity from noise, vibration, and dust
- perceptions of safety and community cohesion due to the construction workforce, along with changed access to recreational infrastructure
- impacts on rural livelihoods and biosecurity risks
- diminished mental health and wellbeing due to project-related stressors
- impacts on environmental values
- changes to traffic movement potentially creating new road safety risks
- potential impacts to Aboriginal cultural heritage, cultural landscapes, and wellbeing.

Singleton Council also noted that during operation, the permanent infrastructure would lead to a permanent change in the visual and physical landscape, affecting residents' sense of place, which was also assessed as a medium social impact.

Singleton Council required robust mechanisms, specifically including a social impact management plan and an equitable community and employment benefit program, to address the above-mentioned concerns and to ensure benefits are shared with local communities.

Response

Singleton Council's comments on the social impacts of the project are acknowledged.

As per mitigation measure S01, a social impact management plan (SIMP) will be implemented during construction of the project (refer to *Appendix D (Updated mitigation measures)* in the Amendment Report). The SIMP will include:

- commitments and management measures, specifying the social impacts addressed, affected stakeholders, implementation timeframes, roles and responsibilities
- a description of how project-specific and regional social changes will be monitored to support adaptive management
- mechanisms for community and stakeholder input to mitigation planning and evaluation of effectiveness.

As per section 6.3.2 of *Technical Report 6 – Social impact assessment* in the EIS, EnergyCo is expecting to commence consultation with relevant communities in 2026 to inform the design and delivery of the community and employment benefit program in the Hunter-Central Coast region.

Social – construction worker code of conduct

Summary of issue

Singleton Council expressed concerns related to the expected behaviour of the construction workforce. Singleton Council acknowledged the commitment to a code of conduct for workers. Singleton Council stated that it expects this code to be rigorously enforced, incorporating a zero-tolerance policy for anti-social behaviour, as outlined in Singleton Council's *Draft Construction Workers Accommodation Policy* (2025) and DPHI's *Guidelines for Construction Workers Accommodation* (2025).

Response

The social impact management plan for the project will include a code of conduct for workers, which will include a zero-tolerance policy for anti-social behaviour.

However, it is noted that since the public exhibition of the EIS, the worker accommodation at the Gouldsville Road construction support site within Singleton LGA is no longer proposed (refer to *Appendix A (Updated project description)* of the Amendment Report).

7.4.10 Historic heritage

Management and mitigation

Summary of issue

Singleton Council noted that there are 12 historic heritage items within the project impact area and another 15 within the visual study area. Singleton Council also noted that five sites of Commonwealth heritage significance are located within the SMA and specifically mentioned Oakley Estate and Warringah Stud/Old Myrtle.

Singleton Council noted that the transmission corridor would encroach into the curtilage of Oakley Estate, and a moderate visual impact is anticipated. Minor direct impacts and moderate visual impacts are also predicted for the 'Stafford' homestead and the 'Clifford' homestead (ruins).

Singleton Council required that the historic heritage management plan be robustly developed through consultation with Council's Heritage Advisory Committee, Heritage NSW and NPWS.

Singleton Council also supported the proposed installation of a commemorative plaque and ongoing consultation for preserving the water source associated with the Wishing Well.

Response

Singleton Council's observations on the historic heritage impacts identified in the EIS are noted.

A historic heritage assessment addendum was undertaken for the Amendment Report (refer to *Section 6.9* and *Appendix J (Historic heritage impact statement addendum)*) to assess the potential construction and operational impacts associated with the amended project. Impacts to Commonwealth heritage items or heritage items listed on the Singleton LEP 2013 are anticipated to remain the same as a result of the amended project with the exception of the Brick farmhouse (I142). No changes to direct impacts on the Brick farmhouse are anticipated however the HTP corridor moving closer to the heritage item would increase the indirect temporary and permanent visual impacts from low to moderate.

The mitigation measures and management plans proposed in the EIS would be implemented during construction and operation of the HTP. The measures include the preparation of a historic heritage management plan (HHMP) (mitigation measure HH1). The HHMP will be developed in consultation with Heritage NSW, NPWS and Council's Heritage Advisory Committee on relevant heritage items. No additional mitigation measures are required in response to the amended project.

Singleton Council's support of the proposed installation of a commemorative plaque for the Wishing Well is noted. The commemorative plaque will be installed in a location as close as possible/practicable to the water source of the Wishing Well, which is to be determined through further consultation with NPWS, FCNSW, Heritage NSW (mitigation measure HH8) and Traditional Owners, in accordance with mitigation measure AH04 (refer to *Appendix D (Updated mitigation measures)* of the Amendment Report).

Discussions with key stakeholders, in regard to preserving the water source associated with the Wishing Well is ongoing.

7.4.11 Noise and vibration

Management and mitigation

Summary of issue

Singleton Council expressed concern that construction and operation of the project would generate noise impacts across Singleton LGA affecting sensitive receivers, as presented in the noise and vibration impact assessment included in the EIS.

Singleton Council called for strict adherence to a construction noise and vibration management plan(s), community notification protocols, and ongoing monitoring to ensure operational noise remains within acceptable limits, along with direct consultation and solutions for affected landowners.

Response

The noise assessment presented in the EIS represents a worst-case scenario and prior to any mitigation. Through the implementation of mitigation measures, the construction noise impacts would be further minimised.

A construction noise and vibration management plan (CNVMP) (mitigation measure NV1) will be prepared as part of the CEMP which will identify feasible and reasonable measures to reduce potential noise impacts during construction of the project. The CNVMP will include community notification protocols and requirements for noise and vibration monitoring during construction (refer to *Appendix D (Updated mitigation measures)* in the Amendment Report).

Operational noise monitoring is also proposed in accordance with mitigation measure NV9 for receivers where potential operational noise levels are predicted to exceed project trigger levels. This operational monitoring will also confirm the actual noise levels and the need for noise mitigation in the event of exceedances of operational noise criteria.

Noise exceedances are not predicted from the operation of Bayswater South or Olney switching stations and, as such, mitigation would not be required. This would be verified through operational noise monitoring, once operational.

7.4.12 Surface water

Management and mitigation

Summary of issue

Singleton Council noted that most of the project impact area drains into the Hunter River. Singleton Council highlighted that water quality is currently influenced by coal mining, Defence activities, and agriculture in the sub-catchments of Glennies Creek to Glendon Brook (near the Singleton Military Area).

Singleton Council noted that potential water quality impacts during construction, specifically from concrete batching and the storage of chemical/hazardous materials, were rated as moderate in high sensitivity environments, as outlined in the surface water impact assessment included in the EIS. Singleton Council noted that the project intersects habitat for the endangered Southern Purple

Spotted Gudgeon at Wollombi Brook, Congewai Creek, Black Creek, and Monkey Place Creek. Council acknowledged that there are no significant impacts anticipated to the drinking water supply for Singleton.

Singleton Council required comprehensive soil and water management plans to safeguard water quality, maintain stream stability, and protect aquatic biodiversity, particularly at watercourse crossings.

Response

A SWMP will be prepared for the HTP and will provide mitigation measures to minimise impacts on soil and water (refer to mitigation measure SW1 in *Appendix D (Updated mitigation measures)* of the Amendment Report). The SWMP will identify foreseeable risks relating to water quality during construction and will detail how these risks will be managed and will contain strategies and controls for managing erosion and sediment control and stormwater management. In addition to the SWMP, mitigation measures were included in the EIS in response to the risks identified by Singleton Council, specifically the implementation of:

- a water quality monitoring program (as part of the SWMP), which will focus on locations with sensitive receiving environments (mitigation measure SW4)
- erosion and sediment control plans (mitigation measure SW3), supported by further field assessment and soil ground truthing program (mitigation measure SL1)
- stormwater management measures for mobile and temporary concrete batching plants (mitigation measure SW6)
- controls on the storage of chemicals, fuels and other hazardous substances, and response to accidental spills (mitigation measures DG1 and DG2)
- rehabilitation of disturbed areas to manage erosion and soil risks (mitigation measure SL3, SL4 and SL5).

Impacts to aquatic biodiversity will also be minimised and mitigated through the following mitigation measures:

- mitigation measure B12, which requires the implementation of a riparian vegetation management plan (RVMP). The RVMP will manage activities within vegetated riparian zones to minimise impacts to aquatic environments and will identify the measures to be implemented to minimise impacts from construction activities (such as temporary and permanent watercourse crossings) within riparian and aquatic environments
- mitigation measure B16, which requires the design of watercourse crossings to minimise disturbance and harm within riparian corridors and aquatic habitat to be rehabilitated where practicable in accordance with the *Guidelines for controlled activities on waterfront land* (NRA 2018), *Why do fish need to cross the road? Fish passage requirements for waterway crossings* (Fairfull and Witheridge 2003) and *Policy and guidelines for fish habitat conservation and management* (DPI 2013)
- mitigation measure SW2, which requires scour protection for any infrastructure within a watercourse. The design of this infrastructure will incorporate features that minimise impact on flow conditions and natural function of the watercourse, where feasible and reasonable. Works on waterfront land would also take into account the Controlled Activities guidelines released by DCCEE – Water.

7.4.13 Flooding

Impact assessment approach

Summary of issue

Singleton Council noted that the project impact area crosses Mudies Creek within the SMA. Singleton Council noted that construction activities within laydown areas were expected to have only a minor impact on overall flood behaviour. Monopole towers have the potential to obstruct flow conveyance in the SMA. Singleton Council also noted that operation of the project is predicted to have only minor and localised impacts on peak flood levels and flow velocities in the Singleton LGA. Singleton Council sought to ensure that the flooding assessments were conservative and that any potential impacts are managed.

Response

The flood assessment presented in the EIS has been carried out in accordance with relevant legislation, policies and guidelines, the details of which are summarised in *Section 3.1 of Technical Report 12 – Flooding impact assessment* of the EIS.

The assessment presented in the EIS is considered to represent a balanced assessment of the potential impact of the proposal on flood behaviour.

A range of mitigation measures has been included in the EIS to manage residual impacts of the project on flood behaviour. These measures include the provision of scour protection to manage localised increases in flow velocities around transmission line towers within the SMA (mitigation measure FL11).

7.4.14 Soils and contamination

Contamination of soil or groundwater

Summary of issue

Singleton Council acknowledged there is a medium risk of encountering groundwater contamination in areas like the SMA. Singleton Council stated that the SMA was specifically noted as being listed in the NSW EPA's per- and poly-fluoroalkyl substances (PFAS) investigation program and the Unexploded Ordnance (UXO) database. Singleton Council required stringent management plans for potential PFAS and UXO contamination, including site-specific risk assessments and consultation with the Department of Defence.

Singleton Council acknowledged that there are soil contamination concerns at mining sites and the SMA, with a medium to high potential risk due to PFAS and UXO. Singleton Council emphasised the need for stringent soil and contamination management plans, particularly for sodic soils and potential contaminants, to prevent environmental degradation and protect agricultural productivity.

Response

The Singleton Military Area is listed in the NSW EPA PFAS investigation program. A PFAS Management Area Plan for the Singleton Military Area and the surrounding area has been completed by the Department of Defence. The defined PFAS management area is around

three kilometres to the northeast, and outside of the project impact area. Groundwater flow direction from the PFAS management area is inferred to the north-northeast, and away from the HTP corridor. As such, interaction with areas of PFAS is not expected during construction and would be managed in accordance with contamination management plan (mitigation measure C1) and an unexpected finds protocol (mitigation measure C7).

As per mitigation measure C1 of *Technical Report 13 – Contamination preliminary site investigation*, contamination risks during construction would be managed through implementation of a contamination management plan. More specific mitigation measures to minimise risks of encountering contamination within mine sites have been proposed including mitigation measure C3, C4 and C5. Mitigation measure C9 specifies that a site-specific risk assessment will be completed in consultation with Department of Defence for construction impact areas in the Singleton Military Area to manage risk of UXOs (refer to *Appendix D (Updated mitigation measures)* in the Amendment Report).

7.4.15 Hazards and risk

Aviation safety

Summary of issue

Singleton Council noted the need for obstacle lighting for non-certified aerodromes and helicopter landing sites within 5.6 kilometres of the HTP. Singleton Council highlighted the possibility for aviation impacts to the SMA. Singleton Council required compliance with aviation safety requirements.

Response

Technical Report 16 – Aviation impact assessment of the EIS reviewed the requirements for marking and lighting for high-tension power lines located outside the Obstacle Limitation Surface (OLS) for aerodromes in section 5.8. *Technical Report 16 – Aviation impact assessment* concluded that marking and lighting of high-tension power lines outside of an OLS are not required under Civil Aviation Safety Regulations. However, consultation with relevant stakeholders including the Department of Defence and the operators of helicopter landing sites (HLS) will be undertaken during the detailed design phase of the project to determine if marking and lighting is required, more information can be found in mitigation measure AS5 of *Technical Report 16 – Aviation Impact Assessment*. This commitment not only ensures compliance but also goes beyond basic aviation safety standards. Relevant design and construction standards such as Transgrid's *Transmission Line Design Manual – Major New Build (TLDM-MNB)* and *AS3891 – Air Navigation – Cables and the Supporting Structures, parts 1 and 2* will be implemented where required.

Impacts to telecommunications

Summary of issue

Singleton Council noted potential radio frequency interference from transmission infrastructure on existing Telstra assets in the SMA and at Mount Thorley. Singleton Council required mitigation of telecommunications interference.

Response

During operation it has been determined that, under wet conditions, radio frequency interference is likely to negatively impact commercial AM radio reception within 131 metres of the centre of the transmission line easement (see *section 21.4.4, Chapter 21 (Hazards and risk)* of the EIS). Mitigation measure TC1 will be implemented during detailed design to address these impacts (refer to *Appendix D (Updated mitigation measures)* in the Amendment Report). Other forms of communication (commercial FM radio, aeronautical VHF, UHF CB radio and digital television) would not be noticeably affected by radio frequency interference at the edge of the transmission line easement.

7.4.16 Other matters

Waste management – general waste management

Summary of issue

Singleton Council noted that a wide range of waste can be accepted at the Singleton Waste Management Facility (located at Dyrring Road, Fern Gully). Singleton Council suggested that further consultation be undertaken during the detailed design of the project to confirm the facility's capacity to accept the indicative volumes of waste generated by the HTP. Furthermore, Singleton Council required the development of a circular economy management plan to establish a long-term, sustainable hierarchy for managing waste associated with the HTP.

Response

EnergyCo notes Singleton Council's comments regarding local waste management and the capacity of the Singleton Waste Management Facility on Dyrring Road, Fern Gully.

As described in *section 22.3.3, Chapter 22 (Other matters)* of the EIS, and consistent with mitigation measures WM1 and WM2, further consultation will be undertaken during detailed design with Singleton Council and facility operators to confirm the capacity of licensed waste management facilities to accept the indicative volumes of waste generated by the project.

Waste generated during construction would be managed using circular economy principles and the waste hierarchy of avoid, reduce, reuse and recycle before disposal, in accordance with the *Protection of the Environment Operations Act 1997* and the *Protection of the Environment Operations (Waste) Regulation 2014* (mitigation measure WM3 and WM4). The waste management and resource recovery plan (WMRRP) will outline processes for identifying, classifying and tracking waste streams, as well as opportunities for reuse and recycling within the region.

Economic – management and mitigation

Summary of issue

Singleton Council noted that the project has the potential for increased competition for workers, which could strain labour availability in the regional locality. Singleton Council sought mechanisms to support local businesses and to ensure a balanced labour market. Singleton Council supported drawing on initiatives such as the local business and employment strategy proposed in the EIS.

Response

EnergyCo notes Singleton Council's feedback regarding the potential for increased competition for workers during construction and the need to support local businesses and maintain a balanced labour market.

The potential for short-term pressure on labour availability was identified in the social impact assessment (see *section 6.5.4 of Technical Report 6 – Social impact assessment*) and in *Chapter 14 (Social)* of the EIS. The assessment notes that concurrent major infrastructure projects in the region may contribute to temporary competition for labour, particularly in construction, accommodation and service sectors.

To manage these risks, a local business and employment strategy (mitigation measure S05) will be implemented, which aims to create local employment and supplier opportunities while managing demand in a way that avoids undue pressure on the existing labour market. The strategy focuses on building workforce capacity through training and upskilling, supporting local businesses to participate in the supply chain, and coordinating workforce planning to reduce the risk of labour displacement from other sectors. The strategy will be refined in consultation with councils, industry groups and regional stakeholders.

The social impact assessment also outlines EnergyCo's broader commitments to workforce planning and local participation, including diversity targets, regional education and training partnerships, and targeted support for Aboriginal participation through the implementation of the industry and Aboriginal participation plan (mitigation measure S06). These measures, together with the community communication strategy (mitigation measure S02) and the regionally focused engagement, will support the monitoring and adaptive management of labour market impacts (see social impact management plan (mitigation measure S01)).

EnergyCo will continue to engage with Singleton Council and local industry groups during detailed design and procurement to support a balanced labour market, promote local business readiness and participation, and ensure that workforce planning measures remain responsive to regional conditions.

7.4.17 Cumulative impacts

Cumulative traffic impacts

Summary of issue

Singleton Council noted that several construction access routes and intersections within the LGA were identified for use, including Lemington Road, Archerfield Road, Gouldsville Road, Long Point Road West, Comleroi Road, and sections of the Golden Highway and Putty Road. Council stated that these selected routes currently carry significant heavy vehicle volumes associated with existing mining and industrial activity.

Singleton Council expressed concerns about the cumulative impacts on the local network during the peak construction years (2027 to 2029), a period when several other major projects are also expected to be underway. Notably, if the HVO Continuation Project is approved, the proposed relocation of Lemington Road and its use by the HTP may 'coalesce'. Singleton Council stated that the cumulative impacts on the local network must be considered.

Singleton Council stressed that cumulative impact mitigation would be critical to ensure the serviceability of roads for residents, emergency services, and other road users. An important consideration is how each project would assess and determine responsibility for wear and tear.

Singleton Council emphasised that cumulative traffic impacts must be addressed through coordinated planning by proponents to ensure the local road network is not subject to unacceptable strain.

Response

EnergyCo acknowledges Singleton Council's concerns regarding construction traffic volumes on key local routes and the potential cumulative impacts during the project's construction years.

The cumulative traffic assessment for the project and HVO Continuation Project has been assessed in the *section 7.1.2 of the Technical Report 4 – Traffic and transport impact assessment* and updated in *Appendix H (Revised traffic and transport impact assessment)* in the Amendment Report. Notably, the project construction sites within the region are spread across three locations (off Hebden Road near Lake Liddell, off Pikes Gully Road and on Gouldsville Road) which reduces concentration of impacts at a particular location if necessary. The construction support sites proposed off the New England Highway are located north of the Lemington Road/New England Highway intersection, therefore, the project is predominantly adding trips to the traffic movements to\from the north (Muswellbrook) which have less demand than to\from the south (Singleton).

This assessment has been updated in *Appendix H (Revised traffic and transport impact assessment)* in the Amendment Report to include a quantitative cumulative assessment of key intersections along the Golden Highway and New England Highway, including the existing Golden Highway / Lemington Road intersection, the New England Highway / Lemington Road intersection and Golden Highway / Comleroi Road. This revised assessment has accounted for traffic generated by the HVO Continuation Project on existing key intersections alongside other major projects. This identified that there would be a further deterioration in the level of service at the New England Highway / Lemington Road intersection, and restrictions on network peak hour movements would be implemented to manage the contribution from HTP.

As required by mitigation measure TT9, EnergyCo will coordinate with HVO on the proposed HVO Continuation Project on works in the vicinity of Lemington Road and the associated staging / timing to minimise adverse performance and road safety impacts on Lemington Road and at its intersections with the New England and Golden highways.

EnergyCo will continue to work with Singleton Council, Transport for NSW and other project proponents during detailed design to coordinate construction staging/timing with the aim of minimising and managing potential cumulative impacts. This includes the impact of shared access routes and developing mitigation measures to mitigate cumulative impacts as they arise (mitigation measure Cl1). As discussed in *section 7.4.6* of this Submissions Report, mitigation measure TT6 requires the need for HTP to monitor and rehabilitate impacts to local roads as a result of HTP construction vehicles.

General cumulative impacts

Summary of issue

Singleton Council noted that the Singleton LGA is a focus for the cumulative impact assessment because of the numerous simultaneous projects anticipated, including new energy developments, mining activities, and transport upgrades. Council specifically mentioned the Maison Dieu Solar Farm, Hunter-Central Coast REZ and HVO Continuation Project.

Singleton Council expressed concern about several potential cumulative impacts, specifically:

- traffic congestion across the local network
- disruption to community wellbeing
- 'construction fatigue' resulting from hosting a large proportion of future energy infrastructure projects
- overlapping heavy vehicle movements and minor noise exceedances with projects like the HVO Continuation Project and the Maison Dieu Solar Farm.

Singleton Council urged EnergyCo to commit to ongoing, proactive engagement and coordination with proponents of other relevant projects to identify, avoid, and mitigate cumulative impacts, especially concerning traffic, community amenity, and local services.

Response

EnergyCo acknowledges Singleton Council's concerns regarding cumulative impacts associated with multiple concurrent projects within the Singleton LGA. The EIS assessed cumulative impacts in accordance with the *Department of Planning and Environment guideline Cumulative Impact Assessment for State Significant Projects* (DPIE 2021), including consideration of regional energy, mining and infrastructure activities (see *section 5.20, Chapter 5 (Assessment of impacts)* of the Amendment Report for the updated cumulative impacts assessment).

Potential cumulative interactions relating to traffic, amenity, and community wellbeing were identified in the EIS and are managed through the application of relevant mitigation measures, including those requiring construction coordination with other proponents, councils and landowners. Additionally, cumulative impacts were assessed as part of the Amendment Report (refer to *section 5.20*) including updated or additional mitigation measures (refer to *Appendix E (Updated mitigation measures)* of the Amendment Report).

Cumulative noise impacts have been reviewed in *section 5.20* of the Amendment Report. Concurrent construction activities between the HVO continuation projects and HTP are possible at several discrete locations, however, there are only a small number of sensitive noise receivers common to both the HVO continuation projects and the HTP in NCA04 and NCA05. Therefore, potential cumulative noise impacts would be limited to a small number of sensitive noise receivers. If HTP construction works are expected to coincide with HVO construction works in the vicinity of receivers in NCA04 and NCA05, additional assessment (including development of reasonable and feasible mitigation and management controls) would need to be undertaken.

Construction of Maison Dieu Solar Farm and the HTP would be likely to occur concurrently. The EIS prepared for Maison Dieu Solar Farm assessed that up to 14 sensitive noise receivers would experience construction noise in exceedance of noise management levels (MAC, 2024). The

cumulative noise impacts associated with the construction of the HTP has the potential to contribute to cumulative impacts for sensitive noise receivers in proximity of both the HTP and Maison Dieu Solar Farm.

As required by C11, EnergyCo will coordinate with relevant construction contractors to sequence construction activities to avoid any overlapping construction activities, wherever practicable. Additional mitigation measures would be developed in consultation with affected landowners should construction activities coincide from both projects.

During detailed design, the project will continue to engage with Singleton Council and other project proponents (see mitigation measure C11) to support coordinated planning and minimise overlapping construction impacts where practicable.

8

Response to government submissions

8 Response to government submissions

This section outlines the advice and issues raised by government agencies and provides responses.

8.1 DCCEEW Environment and Heritage NSW (Aboriginal heritage)

DCCEEW – Environment and Heritage NSW (Aboriginal cultural heritage) (herein referred to as Heritage NSW) provided advice on Aboriginal cultural heritage matters, dated 22 August 2025. Consideration of the items raised in their advice is provided in the following sections.

8.1.1 Site identification and distribution

Summary of issue

Heritage NSW raised concerns about the amalgamation of 191 discrete Aboriginal site recordings into a single low-density background scatter site. This approach was considered inconsistent with legislative requirements and archaeological best practice. Heritage NSW noted that such treatment obscures the spatial distribution of Aboriginal objects, complicates data comparability, and may conflict with existing approvals and management obligations across various land tenures. Heritage NSW recommended that all isolated artefacts and low-density scatters be individually registered on AHIMS and managed separately. Clarifications were also requested regarding site boundary definitions, density thresholds, and consistency with previous regional assessments.

Heritage NSW requests the following matters be addressed:

1. All isolated artefacts and low-density scatters identified during survey and/or test excavations be individually registered on the Aboriginal Heritage Information Management System (AHIMS), in accordance with Section 89A of the *National Parks and Wildlife Act 1974* and Requirement 6 of the Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW
2. The site descriptions provided in *Technical Report 2 – Aboriginal cultural heritage assessment* of the EIS (e.g. *Table 10.1*, *Table 11.2*, and *Appendix F.3*) be updated to include details of site extent and boundary determination, consistent with Requirements 6 and 7 of the Code of Practice. Ensure the site definitions and recording methods developed for the assessment as presented in Section E.3.1 of 'Appendix E' state that "*stone artefacts more than 50 metres apart were recorded as separate sites*" and that this approach was adopted to allow "*for efficiencies in site management and to establish consistency in site recording methods*" are adopted

3. Provide justification for the use of <20 artefacts/m² as the threshold for defining low-density scatters, noting that previous assessments in the region (e.g. Hunter Valley Operations continuation project) used <10 artefacts for low-density and 11–30 for medium-density scatters.
4. Identify all Aboriginal sites within the project impact area that are also covered by existing approvals or heritage management plans (HMPs), and/or land managed by NPWS, Forestry Corporation of NSW, or the Department of Defence, including all current management commitments. To avoid compliance issues and ensure consistency in management measures for these sites, *Technical Report 2 – Aboriginal cultural heritage assessment* of the EIS should be updated as follows:
 - include a section acknowledging the interface between the project impact area and existing approvals (such as mines and wind farms) and/or land managed by NPWS and Forestry Corporation of NSW
 - identify all Aboriginal sites within the project impact area that are also covered by existing approvals or heritage management plans (HMPs), and/or land managed by NPWS and Forestry Corporation of NSW, including all current management commitments
5. Ensure appropriate investigation and management of sites associated with untested areas of potential archaeological deposit (PAD), including provisions for post-approval testing under a HMP and conservation of significant Aboriginal cultural heritage
6. Include further details of the potential Aboriginal flaked glass artefact identified at site FF6 (AHIMS 37-6-0724), including:
 - analysis of diagnostic features of the object to support its identification
 - photographs of the different surfaces and/or diagnostic features
 - consideration of the potential for additional contact-period archaeology, noting additional investigation and management may be required.
7. To help minimise cumulative impacts, Heritage NSW recommends updating the management recommendations to incorporate measures that reduce overall harm from the project. Management recommendations be updated to help minimise cumulative impacts and include:
 - provisions for managing 'low significance' sites on an individual basis as this will allow the retention of any isolated artefacts and low-density scatters where impacts are not required
 - provisions for the cultural salvage /community collection of known isolated artefacts and low-density scatters where impacts cannot be avoided.

Response

1. All cultural materials newly encountered within the amended project impact area are now documented on the AHIMS database, including isolated and low-density artefact scatters. These isolated and low-density artefact scatters are now also included as individual objects and sites as part of the archaeological resource of the project impact area included in *Chapter 6 (The archaeological resource)* and *Appendix D (Aboriginal site information)* of *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report.
2. Additional information on site extent has now been provided within *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report for all sites within the amended project impact area and/or within 55 metres of the amended project impact area. This is now presented in *Chapter 6 (The archaeological resource)* and *Appendix D (Additional site*

information) of *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report.

In relation to the recording of stone artefacts – with artefacts more than 50 metres apart being documented as separate sites – this has generally been adopted in *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report. It is highlighted that there are deviations from this within *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report where previously documented sites have opted for other values, and/or where field observations have considered elements at differing distances to be part of the same site and have recorded them as such.

3. While the HVO Continuation Project uses 11-30 artefacts as a descriptive measure to identify differences in the cultural assemblage, key criteria for identifying significant cultural materials in the document was the presence of densities of at least 30 artefacts/m² (a value adopted as a conservative estimate). The HVO Continuation Project ACHA notes:

When considering the data developed as part of *Technical Report 2 – Aboriginal cultural heritage assessment* of the EIS, the presence of higher artefact densities – a conservative value of 30/m² is applied, but as outlined above is significantly below previously recorded values – or the presence of sand unit indicative of the Warkworth sand system has been used in refining significance and cumulative impact.

The HVO Continuation Project ACHA goes on to only identify sites that met these criteria as significant and requiring more detailed management consideration. Indeed, determining an artefact threshold to define a site and its significance is common practice within cultural heritage management, with values in NSW ranging from around 15 artefacts/m² to up to 30 artefacts/m² commonly applied. What is proposed in the HTP ACHA is therefore not in contrast to established processes.

This issue is largely resolved as a result of changes to the cultural assemblage in *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report which now presents all cultural material within and near the amended project impact area in response to requests in this submission (i.e. sites are no longer amalgamated). For the purposes of describing sites, 20 artefacts/m² continues to be adopted as a threshold for descriptions (which is below the analytical values applied for the HVO Continuation Project), however all sites have now been assessed and proposed for management regardless of artefact density.

4. Where available, previous and existing documents that outline the management and/or mitigation of impacts to the cultural assemblage within the amended project impact area have now been reviewed. In most instances, minor modification to mitigation measures in *section 9.5 of Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report have been adopted to align with established processes and to avoid any conflict. This has not always been achievable where existing documentation seeks the conservation of cultural materials in areas where ground disturbance is proposed for the project.

In relation to unmitigated harm, all cultural materials within the amended project impact area, and several outside, but within 55 metres of the amended project impact area, now have mitigation measures proposed in *Appendix E (Post-approval mitigation requirements – updated guiding principles)* of *Appendix F (Aboriginal cultural heritage assessment addendum)* of the

Amendment Report. This includes the suitable recovery of isolated and low-density stone artefacts.

5. All cultural materials within the amended project impact area and within 55 metres of the amended project impact area documented during the post-exhibition phase of the project are now presented and assessed separately in *Chapter 6 (The archaeological resource)* and *Appendix D (Aboriginal site information)* of *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report. Management of these sites, including those with potential archaeological deposits, is further outlined in *Chapter 9 (Management)* of *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report.
6. With regard to FF6 (AHIMS #37-6-0724), this site reflects a single piece of potentially worked glass found on an access track, with limited other associated cultural materials or cultural deposits. A review of photographic evidence suggests that the glass is non-artefactual. The AHIMS database will be updated as part of *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report to reflect this. It is considered that regardless of its potential to reflect contact activities, the site still remains of low significance given this context.
7. All cultural materials newly encountered within the amended project impact area are now presented and assessed separately in *Chapter 6 (The archaeological resource)* of *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report, and management of these sites are further outlined in *Chapter 9 (Management)* of *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report. Further consideration of cumulative impact is also presented in *section 8.5* of *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report.

The mitigation measures included in *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report now include management of all cultural materials within the amended project impact area, and several important Aboriginal objects, sites and places outside, but within 55 metres of the amended project impact area. In the case of isolated and low-density stone artefacts, *Appendix E.3 (Cultural materials management and mitigation measures)* of *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report now includes direction to undertake the recording and collection of these cultural materials prior to impact. Further management of these cultural materials would be outlined in the proposed ACHMP, which would include further details of the methods, analysis and management of any recovered materials.

8.1.2 Clarification regarding survey, previously recorded sites and evaluation of potential rockshelter sites

Summary of issue

Heritage NSW requests clarification on the following matters:

8. *Technical Report 2 – Aboriginal cultural heritage assessment* of the EIS states that 17 per cent of the project impact area remains to be surveyed, 3 per cent of which represents “inaccessible dangerous terrain.” Clarification is sought on the definition of this term and confirmation of whether alternative approaches (e.g. drone survey) have been considered. Heritage NSW requests confirmation of the timeframe for surveying the remaining project impact area, predictions of archaeological potential, and proposed management measures.
9. Many previously recorded Aboriginal sites within or near the project impact area (82 within the area and 48 within 200 metres) were not relocated during the survey and were presumed destroyed. Heritage NSW requests evidence beyond surface visibility to justify this assessment, including detailed site condition information and photographs. Where visibility issues may have prevented re-identification, sites should not be classified as destroyed; instead, appropriate management measures should be developed. These measures may include controlled vegetation clearing for reinspection and potential surface salvage under a heritage management plan prior to construction
10. The criteria used to evaluate potential rockshelter sites (in *Section 8.4.1 of Technical Report 2 – Aboriginal cultural heritage assessment* of the EIS) be updated to include explicit consideration of deposit presence (e.g. PAD) and that all potential rockshelter sites be re-evaluated accordingly
11. Why HTP-C-RS03, HTP-C-RS18, HTP-C-RS24, and HTP-S-RS13, which are rockshelters recorded as containing PAD, were identified for test excavation but have been excluded from impact assessment in *Technical Report 2 – Aboriginal cultural heritage assessment* of the EIS. Where impacts may occur, additional assessment must be undertaken.

Response

8. *Section 5.3 of Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report presents further information on inaccessible dangerous terrain. This includes extremely rugged and vertical or near vertical landforms typically within the areas described as HTP Central and HTP South. Constrained access in these areas would require personnel to climb up and down these environments to enable access. It was considered by field personnel that these locations were too dangerous to progress into due to the potential for injury. In addition, many of these areas were heavily vegetated, reducing visibility and further making investigation dangerous. Investigation of these areas via alternate methods such as drone or aerial survey would also not be possible given the denseness of the vegetation.

In combination with the *Technical Report 2 – Aboriginal cultural heritage assessment* of the EIS investigations, 82.5 per cent of the amended project impact area has been inspected. The total survey coverage leaves only about 418 hectares of the amended project impact area (around 17.5 per cent) remaining unsurveyed, which is primarily located within areas pending access agreements (11 per cent), as well areas of steep and/or rugged terrain (3 per cent) or sealed roads and tracks that would be used for construction but would be subject to limited (if any)

additional ground disturbance (4 per cent). This remaining survey would occur during detailed design either in advance and/or as part of the development of the Aboriginal cultural heritage management plan.

9. In *Technical Report 2 – Aboriginal cultural heritage assessment* of the EIS, 82 Aboriginal objects, sites and places within the project impact area were considered to have been destroyed. These sites were primarily previously documented sites that were considered destroyed following an inspection of the recorded site location by a team of archaeologists and Aboriginal participants, which failed to identify the reported cultural materials. Table D.4 and Figure 6.1 of *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report include further review of sites previously identified as destroyed within the amended project impact area. Of the sites considered previously destroyed within *Technical Report 2 – Aboriginal cultural heritage assessment* of the EIS, 10 are documented as previously destroyed on their site cards or other documentary information and are continued to be assumed destroyed in *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report as a result. With the exception of two high density artefact scatters (#37-6-3376 and #37-6-4022) and two moderate density artefact scatters (#37-6-0720 and #37-2-6514), the remainder of these sites consists of 41 isolated stone artefacts and 27 low density artefact scatters often identified in disturbed contexts, such as access tracks, unsealed roads or dams. While it is still believed that these sites are highly likely to be destroyed given these conditions and the inability for several experienced heritage professionals to identify them, they have nonetheless been included in the cultural assemblage of the amended project impact area for further consideration and management as part of the project.
10. As part of investigations for *Technical Report 2 – Aboriginal cultural heritage assessment* of the EIS, 93 caves and overhangs were encountered which were assessed against regional criteria to determine whether they were cultural, with many containing no clear evidence of past use. Criteria included the presence of art or engraved motifs, their size, their relationship with other cultural materials, and knowledge of the site by the Aboriginal field survey participants. Where three of these criteria were met, the site was considered cultural and was identified as an Aboriginal site. Where criteria were not met, the feature was considered non-cultural. Table D.4 of *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report presents a reconsideration of the caves and overhangs where the field team identified the presence of a potential archaeological deposit or other soil profile that could be investigated to inform and/or validate their past use. While the inclusion of this criterion does not elevate any of the previously documented caves and overhangs so as to validate their cultural origin, it nonetheless identifies 11 that can be further investigated. These are primarily found on the periphery of the amended project impact area, with several (3) outside the amended project impact area, but within 55 metres. As such, these additional sites have now been incorporated into the cultural assemblage outlined in section 6.5 of *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report.
11. HTP-C-RS03, HTP-C-RS18, HTP-C-RS24, and HTP-S-RS13 have now been incorporated into *Chapter 6 (The archaeological resource)* and *Appendix D (Aboriginal site information)* of *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report, with the management of potential impacts to these and other rockshelters included in *Chapter 9 (Management)* and *Appendix E (Post approval requirements – updated guiding principles)* of *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report.

8.1.3 Clarification of significance assessment and harm to Aboriginal sites

Summary of issue

Heritage NSW requests clarification and updates on the following matters:

12. Why HTP-N-AS32 (AHIMS 37-6-4487) is ranked as moderate overall significance despite being assessed as high archaeological significance (see Table 11.2)
13. Why the following valid Aboriginal sites have not been included in the impact assessment: 'Heatherlea' (AHIMS 37-6-0010), 'Upper Saddler's Creek' (37-2-0024), HTP-S-RS14 (45-3-5036), 'Sandy Creek/Sunday Creek' (45-3-0905), HTP-N-AS55 (37-6-4563), 'CORROBARE STATE FOREST RD 1' (37-6-2780), and 'Broken Back Trail/Monkey Place Ck' (37-6-0809/37-6-0552)
14. Map 3 of Figure 10.1 shows site HTP-N-AS11 as a moderate-density artefact scatter within the project impact area, but it was not included in Table 10.1 or the impact assessment in Table 12.1. Heritage NSW requests that the impact assessment be updated to include this site
15. The scope and nature of proposed ground disturbance works, including ancillary infrastructure, access trail upgrades, vegetation clearance, tower construction, laydown and switchboard areas, fencing, and existing line upgrades
16. *Technical Report 2 – Aboriginal cultural heritage assessment* of the EIS notes that certain site types (rockshelters, grinding grooves, water holes, stone arrangements) within 55 metres of the project impact area may be vulnerable to vibration impacts, however these were not included in the impact assessment. Heritage NSW requests an updated assessment that considers indirect vibration impacts on all Aboriginal sites within this distance, including approximately 15 rockshelters identified in *Technical Report 2 – Aboriginal cultural heritage assessment* of the EIS but missing from Table G.2
17. The impact assessment should be updated to address potential indirect impacts from altered drainage, erosion, and sediment movement, and site surveys be conducted to verify AHIMS locations for nearby vulnerable Aboriginal sites (e.g. AHIMS 45-3-3174/45-3-3175)
18. The impact assessment be updated to consider whether Aboriginal sites listed in Table G.2 (including those listed in the footnotes) overlap with the project impact area and could be subject to direct, partial harm. This should involve assessing site extent and proximity to the project boundary rather than relying on centroid locations. Where overlap exists, management measures must be developed to address potential partial harm and be proportionate to the site's assessed significance
19. The impact assessment and management recommendations be updated to include any additional Aboriginal sites identified during post-exhibition test excavations
20. Resolution of discrepancies in the total number of Aboriginal sites likely to be impacted, as noted across various sections of the EIS (e.g. compare pg. 428, 703-704, 1035 and pg. C.4 in Appendix C).

Response

12. The previous finding was reviewed and identified to be in error. The site has now been revisited and is considered of high significance and is outlined in further detail in *Chapter 7 (Significance assessment)* and *Table D.6 of Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report.

13. A revised cultural assemblage for the project has been revisited and is now presented in *Chapter 6 (The archaeological resource)* of *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report. Of the sites raised here, 'HTP-N-AS55' (AHIMS 37-6-4563), 'CORROBARE STATE FOREST RD 1' (AHIMS #37-6-2780), and 'Broken Back Trail/ Monkey Place Ck' (AHIMS #37-6-0809/37-6-0552) are now considered within the amended project impact area, and have been included in the significance and impact assessments in Chapters 7 and 8 and Appendix D of *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report.

Notably the site cards for 'Heatherlea' (AHIMS 37-6-0010), 'Upper Saddler's Creek' (AHIMS 37-2-024), and 'Sandy Creek; Sunday Creek' (AHIMS 45-3-0905) note that artefacts associated with these sites have been collected and are stored at the Australian Museum, and as no subsurface potential has been associated with these sites, these sites therefore have been considered mitigated for the purposes of this assessment. The site cards will be updated as part of this assessment.

HTP-S-RS14 (AHIMS 45-3-5036) was registered with AHIMS in error. As indicated in Table D.5 of *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report, this site does not meet criteria to be considered a cultural site. AHIMS have been notified of this error, and this information is being updated.

14. This site is not within the amended project impact area, but is within 55 metres, which is the distance within which indirect impacts (e.g. vibration) have potential to occur. As an artefact scatter, this site type is not considered to be adversely affected by indirect impacts such as vibration, meaning it is unlikely to be impacted by the project.
15. There are a range of activities proposed within the construction impact area, and some activities would have a lower likelihood of harming cultural materials during the construction of the project than others. This is most relevant between proposed transmission towers, where activities would be largely limited to vehicle movements for stringing purposes, and large-scale earthworks or ground disturbance are unlikely to be required. As such, cultural materials within these spanned areas between towers would be largely unaffected by the project. Similarly, there are numerous established public roads and access tracks where proposed ground disturbance activities would be localised, and where cultural materials can in most instances be avoided.

In contrast, laydown areas, switching stations, construction support sites and the foundations of proposed towers would require substantive ground disturbance for establishment and require the removal of the upper soil profile on or within which most cultural materials were documented. Vegetation clearance of the construction impact area would also be required for construction, with a 70-metre transmission line easement maintained during operation. These more substantial activities where ground surface disturbance is likely are the activities that have the potential to directly harm Aboriginal objects, sites and/or places where present.

In relation to the establishment of fencing, this would likely involve hand excavation for each fencing post and the use of concrete to place the fence posts into place. The exact location of fencing would be developed through detailed design; however this is unlikely to result in substantial ground disturbance.

In relation to upgrades to existing transmission lines, minimal ground disturbance would be required. This work would involve the stringing of earth wire and communications systems on existing lines/towers as well as tower strengthening work, which would involve adding more braces to existing towers. Temporary supports for the existing towers would not be required during tower strengthening activities as the existing braces would remain in place. As such, this work is unlikely to result in harm to cultural materials.

16. With regard to sites listed in *Table G.2 in Appendix G of the Technical Report 2 – Aboriginal cultural heritage assessment*, it is highlighted that mitigation measure AH03 in *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report states that direct and indirect impacts are not permitted to any sites identified in Appendix G.2, hence their exclusion from potential impact considerations in *Technical Report 2 – Aboriginal cultural heritage assessment* of the EIS. However, this has now been revisited in *Chapter 6 (The archaeological resource)* and *Chapter 8 (Potential and cumulative impacts)* of *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report. These sites continue to be committed for avoidance despite now being included in the impact assessment.
17. With over 550 previously documented sites within 55 metres of the amended project impact area, attempts have been made to visit a substantive number of these through additional surveys conducted as part of *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report, but visitation of all has not occurred. In relation to AHIMS 45-3-3174/45-3-3175, this site was revisited as part of field surveys for *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report and is demonstrated to be within around 10 metres of its documented location, and outside the amended project impact area.

Potential indirect impacts have now been revisited in *Chapter 6 (The archaeological resource)* and *Chapter 8 (Potential and cumulative impacts)* of *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report to further explore the potential for impacts beyond the amended project impact area.

It is confirmed that AHIMS #45-3-3174/45-3-3175 site data has been updated.

18. All cultural materials newly encountered within, and within 55 metres of, the amended project impact area are now presented and assessed separately in *Chapter 6 (The archaeological resource)* of *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report. This includes further consideration and presentation of their spatial extent and dimensions where available, rather than the use of a centroid value. For sites that are a single point, a small buffer to account for recording inaccuracies has been applied, and accounts for a number of cultural materials on the periphery now being considered within the amended project impact area. For large sites, a conservative approach has been adopted with all generally incorporated in a box that uses their large dimension to determine its size. In some specific instances (especially more dated recordings), additional efforts have been attempted to provide a more robust curtilage of the site. Examples of this include BMP 1 (#37-2-0500), JP16 (#37-6-6135), BAY AS and PAD 15 (#37-2-6667), which was recorded as being several hundred square metres in size. Management of these sites are further outlined in *Chapter 9 (Management)* of *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report.

19. Additional information is provided in Chapters 5 to 9 of *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report incorporating findings of the test excavations carried out following the finalisation of *Technical Report 2 – Aboriginal cultural heritage assessment*.
20. Following requested changes to the consideration of isolated artefacts and low-density artefact scatters, discrepancies in the total number of Aboriginal sites likely to be impacted throughout *Technical Report 2 – Aboriginal cultural heritage assessment* are no longer relevant. Updated values are presented now in *Chapter 6 (The archaeological resource)* of *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report.

8.1.4 Management and mitigation recommendations

Summary of issue

Heritage NSW requested the following updates to management and mitigation measures:

21. *Table 13.1* and *Appendix H* to include management measures for:
 - Aboriginal sites with untested areas of PAD, including isolated artefacts, low-density artefact scatters with PAD and rockshelters with PAD
 - Aboriginal sites covered under existing approvals, HMPs, or managed by NPWS, Forestry Corporation of NSW, or the Department of Defence
 - Aboriginal sites containing potential contact archaeology
 - Aboriginal sites that may overlap with the project impact area
 - Aboriginal sites susceptible to indirect impacts from altered drainage, erosion, or sediment movement
22. *Section H.1.3* in *Appendix H* be updated to reflect commitments to avoid direct and indirect impacts to specific sites: DEEP CK MOTHER SWA (AHIMS 37-6-3714), HTP-C-CVM08 (45-3-5010), HTP-C-GG03 (37-6-4484), and HTP-C-GG05 (37-6-5006). These sites should not be grouped under general management requirements that include actions such as ‘excavation’, ‘deconstruction’, or ‘relocation’, as these are inconsistent with the commitment to avoid harm to these Aboriginal sites
23. *Section H.1.3* in *Appendix H* be updated to include ‘HTP-N-AS71’ (AHIMS 37-2-6665) be included in the list of high and moderate density artefact scatters requiring management
24. Clarification on whether any management measures are proposed to mitigate harm to ‘HTP-S-CS01’ (Wishing Well), including consideration of ACH values
25. Clarification on management measures for untested areas of the Warkworth sand system where ground disturbance is required to mitigate impacts to the broader landscape values to which this sand system contributes
26. Management recommendation ‘AH06’ proposes the development of a cultural values mitigation strategy to support an Aboriginal-led research program for Trig Road and Flat Rock cultural landscapes, including sites such as ‘HTP-C-RS14’ (AHIMS 45-3-5-5013), ‘Corrabare State Forest Road 2’ (AHIMS 45-3-3582), ‘Corrabare State Forest Western Side of Langans Rd SWA’ (AHIMS 45-3-3583), and ‘Corrabare’ (AHIMS 45-3-2140). Heritage NSW requests clarification on whether this program will be implemented under an Aboriginal Heritage Impact Permit (AHIP) or SSI consent for the project. If under SSI consent, *Technical Report 2 – Aboriginal cultural heritage*

assessment of the EIS must be updated to consider potential impacts from the research program. Heritage NSW strongly recommends early development of this strategy due to critical time constraints.

Response

21. These have been revisited and are now presented in *section 9.3, section 9.5 and Appendix E (Post approval requirements – updated guiding principles)* of *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report. Specifically, *Appendix E (Post approval requirements – updated guiding principles)* now outlines each site within the amended project impact area and proposed archaeological approaches that are proposed to be adopted for these, including the further investigation of potential archaeological deposits and for Contact cultural materials. Indirect impacts such as impacts from drainage and erosion are also considered. These have been considered against established approvals and methods where they intersect the project, and which are further discussed in *section 9.3* and by each site in *Appendix D.4 of Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report.
22. These sites are now presented in the ‘avoidance’ section of *Appendix E (Post approval requirements – updated guiding principles)* of *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report.
23. This site has now been included in *Appendix E.3 of Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report, which outlines the requirements for mitigation of surface artefact scatters to be considered in the proposed ACHMP outlined in mitigation measure AH04 of *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report.
24. Discussions with key stakeholders remain ongoing, with general agreement on the overall management of this site, which involves relocation of the tangible materials of the well, interpretation at the location of the site, and management of the spring where feasible. In *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report, direction has been included in *Appendix E (Post approval requirements – updated guiding principles)* in relation to developing agreed mitigation measures of the site in close consultation with Traditional Owners and other key stakeholders.

The agreed approach and method would be integrated into the ACHMP as outlined in mitigation measure AH04 of *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report.
25. Additional information on the extent of the Warkworth sand system within the amended project impact area is outlined in *Chapter 5 (Field investigations)* of *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report, with updated management and mitigation measures included in *Chapter 9 (Management)* and *Appendix E (Post approval requirements – updated guiding principles)* of *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report.

26. The cultural values mitigation strategy is proposed to be part of the project approval under the CSSI, and as such these sites would be investigated (and therefore potentially adversely affected) by the project. As such, the known sites proposed for inclusion in this work have now been included in *Chapters 7 to 9 inclusive*, and *Appendix E (Post approval requirements – updated guiding principles)* of *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report.

8.1.5 Aboriginal community consultation

Summary of issue

Heritage NSW requests clarification and supporting documentation regarding Aboriginal community consultation:

27. Section 4.4 of *Technical Report 2 – Aboriginal cultural heritage assessment* of the EIS states that one Aboriginal participant had a substantive database of sites and places within the Pokolbin and Corrabare State forests, which was inaccessible via other publicly available databases and that subsequent on-Country activities were being planned to address the individuals concern that they had not been captured in *Technical Report 2 – Aboriginal cultural heritage assessment* of the EIS. Confirm whether planned on-Country activities have been completed and whether *Technical Report 2 – Aboriginal cultural heritage assessment* of the EIS has been updated to reflect outcomes, including any management or mitigation requirements.
28. Provide evidence that the following communications were sent to all Registered Aboriginal Parties (RAPs):
- Testing methodology emails dated 17 September 2024 and 26 September 2024
 - Stage 4 draft ACHAR notification dated 12 February 2025
 - Revised mitigation measures notification email dated 4 July 2025
 - Ensure all future consultation documentation (e.g. project update letters) clearly shows all relevant email addresses as proof of distribution to RAPs.
29. Clarify how the comments received from Wonnarua Nation Aboriginal Corporation (7 and 11 July 2025) and Aaron Talbott (16 July 2025) in relation to the proposed management measures have been considered and addressed.

Response

27. The database was held by the Aboriginal participant, and an on-Country visit of the project impact area was undertaken with him, Aboriginal heritage archaeologists and EnergyCo representatives to ensure any areas of concern were identified and understood. Ultimately, none of the specific sites of concern to the Aboriginal participant were within or in close proximity to the project impact area.
28. These are now included in Appendix B.1 of *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report.

29. Comments from Wonnarua Nation Aboriginal Corporation seek cultural offsets and/or the provision of land as an outcome of the project. This is being explored more extensively by EnergyCo across its projects, but at this time cannot be committed to. The mitigation measures now include Wonnarua Elders and knowledge-holders to be involved in the cultural values mitigation strategy where broader socio-economic activities of the project are proposed to be discussed as the project progresses.

In relation to Aaron Talbott's comments, *Technical Report 2 – Aboriginal cultural heritage assessment* of the EIS mitigation measures align with his views. Specifically, that mitigation measure AH03 of *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report initially considers avoidance and/or impact minimisation, with mitigation measure AH04 of *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report outlining both how to implement this approach and/or outline mitigation measures (such as salvage and grinding groove relocation as outlined in Mr Talbott's email) as needed.

8.1.6 AHIMS site card updates

Summary of issue

Heritage NSW requests the following updates and clarifications regarding AHIMS site records:

30. Update AHIMS and *Technical Report 2 – Aboriginal cultural heritage assessment* of the EIS to include 'PAD' as a feature for sites 'HVOCP TR47-AS3' (AHIMS 37-2-6514), 'HVO-1267' (AHIMS 37-6-3384), and 'HTP-N-AS71' (AHIMS 37-2-6665), and ensure management measures reflect this
31. Confirm that the AHIMS site cards for 'TRGG grinding groove site' (AHIMS 45-3-2456) and 'BOP-OS8' (AHIMS 37-6-2842) have been updated to correct the location errors
32. Confirm that AHIMS site cards for 'CORROBARE STATE FOREST CABANS RD' (AHIMS 37-6-2779) and 'HTP-C-CMT02' (AHIMS 37-6-4556) have been updated to 'not a site' status, consistent with the results from the Aboriginal Cultural Heritage Assessment
33. Clarify why 'HTP-C-CP01 (Flat Rock cultural landscape)' and 'HTP-N-CVM01 (Hunter Crossing)' have been registered as 'enclosed shelters' rather than 'open' context sites
34. Confirm whether the site cards for the sites listed as destroyed (e.g., AHIMS 37-6-2833 and AHIMS 37-6-1979) in Appendix F.3 have been updated to reflect new artefacts and their status reinstated as 'valid'
35. Review and correct AHIMS registrations for rockshelters, ensuring accurate features such as removal of incorrect "Art" designations and containing 'PAD' where applicable.

Response

30. Table D.1 of *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report specifically outlines these sites in further detail and includes an updated site type column.
- 31-35 These requests have been updated in the AHIMS database.

8.2 DCCEEW Environment and Heritage NSW (Environment and Heritage)

DCCEEW Environment and Heritage NSW (European heritage) (hereafter referred as NSW EH) provided advice on European heritage matters, dated 24 September 2025. Consideration of the items raised in their advice is provided in the following sections.

8.2.1 Historical Heritage Impact Statement

Summary of issue

1. *Technical Report 7 – Historic heritage impact statement* of the EIS should include separate built heritage and archaeological sections because the combined format provides limited assessment (including survey) of non-Aboriginal archaeological potential across the project area. The updated *Technical Report 7 – Historic heritage impact statement* of the EIS must include:
 - a. An update to Section 4.4 Regional Context to include further detailed analysis of relevant histories. The history should include consideration and inclusion of historic imagery, maps and plans, as relevant to potential built heritage and archaeology
 - b. A summary of desktop heritage sensitivity, as informed by the regional context (Item b). This should include consideration of potential for unlisted built or archaeological heritage within the project area. It may be appropriate to develop GIS overlays, utilising any historic imagery to identify areas of sensitivity, to be further assessed during additional survey (Item 2)
 - c. An update *Technical Report 7 – Historic heritage impact statement* of the EIS to include mapping of curtilage boundaries of 'Historic Heritage Values Sites' and 'Historic Heritage Information Management Sites (HHIMS)
 - d. Provision of additional information regarding Historic Heritage Values Site 'Former Test Mine', as shown on Figure 4-1.3.
2. Heritage NSW notes that the project area was subject to targeted heritage survey only, limited to areas of heritage listed curtilages. Thorough survey of the project area is required to ensure that potential unlisted heritage items are identified and assessed. In consideration of this, additional survey is required to ensure that the heritage and archaeological constraints of the project area are understood.
3. It may be appropriate to utilise other sources of survey coverage for the project area to inform an updated assessment of heritage sensitivity. These may include the Aboriginal cultural heritage survey undertaken by EMM for the Aboriginal Cultural Heritage Assessment Report (ACHAR) for this SSI, and coverage of the SMA, as undertaken by Umwelt during development of the heritage management plan. As such:
 - a. Please provide a summary of survey coverage undertaken to date, including any appropriate survey coverage informed by other studies and assessments

- b. Please undertake additional survey of potential areas of heritage sensitivity, as informed by the regional history and desktop summary (Item 1). These will be required to have been undertaken by heritage specialists, with experience in built and archaeological sites
 - c. Listed items that have the potential to be impacted by the proposed works that could not be located during targeted survey should be revisited.
4. The updated the archaeological assessment (Item 1) should include:
- a. Assessment of archaeological potential of listed and unlisted items. Archaeological potential of listed items that do not have archaeological potential specifically referenced in their existing assessment of significance should still be considered
 - b. Assessments of significance of potential archaeological relics of listed and unlisted items, including Commonwealth listings
 - c. Clear mapping of areas of archaeological potential and sensitivity to inform the detailed design for the project, including:
 - i. Mapping overlays of the identified archaeological potential of Oakley Estate, based on the archaeological zoning drawings by Suters Architects (Photos 4.9 to 4.11 of *Technical Report 7 – Historic heritage impact statement* of the EIS)
 - ii. Archaeological potential mapping of listed items
 - iii. Archaeological potential mapping of unlisted items.

Response

1. *Appendix J (Historic heritage impact statement addendum)* of the Amendment Report has been developed to provide separate built heritage and archaeological assessments in *sections 4.5 and 4.4* of the report respectively.

The regional historical context was expanded based on information gathered as part of the potential heritage significance study as described in *sections 3.1.1, 4.2* and appendices of *Appendix J (Historic heritage impact statement addendum)* of the Amendment Report.

The potential heritage significance study includes a summary assessment of potential heritage significance based on desktop research, which was refined following the supplementary site inspections. This resulted in the identification of 21 activity areas (location of historical activity) that were considered to hold potential for heritage significance. Of these, five are associated with listed heritage items (place assessed to hold heritage significance listed under a statutory instrument or Plan of Management) or historic heritage value sites (place within the Singleton Military Area identified in *Appendix F – Historic Heritage Assessment' in, Singleton Military Area Heritage Management Plan (draft)* by Umwelt (Australia) 2021, not on a statutory heritage list). Of the 21 activity areas, six were identified as potentially having local significance and six features were identified as having possible local significance. The assessment of impacts on activity areas and features found six would have indirect impacts and six would have direct impacts from the amended project.

The curtilages of Historic Heritage Value Sites from the Singleton Military Area and the heritage items on the Historic Heritage Information Management System were reviewed based on additional research and supplementary site inspection, where necessary. A summary of findings

from the curtilage review research is included in *Table 4-5 of Appendix J (Historic heritage impact statement addendum)* of the Amendment Report.

Details of the Former Test Mine historic heritage value site has been included *section 4.3.1 Appendix J (Historic heritage impact statement addendum)* of the Amendment Report.

2. As part of *Appendix J (Historic heritage impact statement addendum)* of the Amendment Report, a potential heritage significance study (refer to *section 4.2* of that report) for the entire project impact area was undertaken, the methodology for which was endorsed by Heritage NSW. As a first step, high level desktop research by Charlotte Allen (Senior Heritage Consultant – Historical Heritage Lead) and Megan Porter (Graduate Heritage Consultant) was completed to identify areas of occupation or historical activity. A predictive model was then developed by Charlotte Allen and reviewed by Maggie Butcher (former Team Leader – Heritage (NSW) and Associate Heritage Consultant) to identify activity areas that may have potential for heritage significance. Those activity areas that were considered to have moderate or high potential for heritage values following further research conducted by Charlotte Allen and Megan Porter were shortlisted by Charlotte Allen and subject to visual inspection where access was available. Charlotte Allen and Sakia Ahmed (Built Heritage Consultant) undertook site inspections. A summary of the supplementary surveys is provided in the *section 4.2.2 of Appendix J (Historic heritage impact statement addendum)* of the Amendment Report with more detailed notes and photos provided in *Appendix 4*. As stated in *Table 3-1 of the Appendix J (Historic heritage impact statement addendum)* of the Amendment Report, field survey coverage undertaken as part of *Technical Report 7 – Historic heritage impact statement* of the EIS include visits to the following site locations: 'Stafford', homestead and 'Clifford', homestead (ruins), Brick farm house, Original Forest House Site, The Wishing Well and Saw mill site (Cnr Martinsville Hill and Watagan Forest Roads) on 24-25 January 2024; 'Stafford', homestead and 'Clifford', homestead (ruins) on 6 June 2024; Loder Family Sawmill, Oakley Estate and Warringah Stud/Old Myrtle on 27 June 2024; and Blacksmith's shop and forge – Vere township, Unidentified site – Vere township and Vere school and second range warden's residence on 11 September 2024.

The Saw mill site and Original Forest House (HHIMS site, Osf 15) site location in Jilliby SCA were revisited and evidence of the Saw mill site was confirmed. Liaison with NPWS staff confirmed there are no physical traces remaining of the forest house site. There were two historic heritage value sites in the SMA that could not be located in earlier fieldwork: Unidentified site – Vere township; and Loder Family Sawmill. Further research on their curtilages confirmed they are outside of the project impact area so no supplementary site inspection was undertaken.

3. *Section 4.4 of Appendix J (Historic heritage impact statement addendum)* of the Amendment Report contains an archaeological assessment which includes an assessment of archaeological potential for identified activity areas, both within and outside of heritage items and historic heritage value sites, within the amended project impact area and within 50 metres of the amended project impact area.

An assessment of heritage significance has been completed for areas of moderate and high archaeological potential (refer to *section 4.4 of Appendix J (Historic heritage impact statement addendum)* of the Amendment Report). These have been spatially mapped in *Appendix J (Historic heritage impact statement addendum)* of the Amendment Report. The areas of moderate and high archaeological potential for the Oakley Estate CMP have been digitised as best as possible (the figures in the CMP were not to scale) within this figure series. To mitigate inconsistencies in the

mapping of these areas, mitigation measure HH2 includes provision for exclusion barrier fencing of any significant elements of heritage items or sites to include a minimum of a 5-metre buffer where possible.

8.2.2 Built heritage

Summary of issue

4. The assessment of significance should consider the potential heritage significance of heritage items within the SMA Commonwealth area against NSW heritage criteria, to clearly determine if the items may meet the threshold of State or local heritage significance. For example, Oakley Estate is located within the Singleton Military Area (SMA) and has been assessed as having State heritage significance. Other such items may hold other or similar levels of heritage significance
5. *Technical Report 7 – Historic heritage impact statement* of the EIS states that the Oakley Estate homestead is 30 metres from the HTP corridor and as the corridor doglegs around the homestead, it is likely that a pylon will be located in close vicinity. This would result in a visual impact on the setting of the homestead, with *Technical Report 7 – Historic heritage impact statement* of the EIS assessing that this would be a *moderate* adverse heritage impact. We recommend that alternative routes for the HTP corridor be considered that would avoid this impact and note that there may be opportunities for the HTP to be redirected away from the homestead within the SMA.
6. Please clarify the following in the Landscape Character and Visual Impact Assessment (LCVIA):
 - a. Two viewpoints, 251 (Abbey Green) and 2918 (Heritage dwelling) have been listed with the same address. Please check the addresses of these items and confirm that visual impact assessment for both properties is correct.
 - b. Viewpoint 251 (Abbey Green) impact assessment was changed from Moderate to Low at the detailed assessment stage, but no explanation was provided for this in the report. Please provide justification for the change in assessment.
 - c. Locally listed item Cyril Moxham's House (Singleton LEP 2013 item 139), located at 34 Trefolly Road Wylies Flat, has not been included in *Technical Report 3 – Landscape character and visual amenity*. Please justify why it has been omitted or provide an assessment of the visual impacts on the property.
 - d. The HTP corridor passes through the heritage curtilage of Local item 'Stafford' homestead and 'Clifford' homestead (ruins) (Singleton LEP 2013 item 1142) (lot 25 DP7555267) but the visual impacts on this item have not been assessed in *Technical Report 3 – Landscape character and visual amenity*. Please justify why it has been omitted or provide an assessment of the visual impacts on the property.

Response

4. Historic heritage value sites within the Singleton Military Area, notably the Oakley Estate, and Wishing Well, have been subject to an assessment of heritage significance against the current NSW heritage criteria in *section 4.3.2 of Appendix J (Historic heritage impact statement addendum)* of the Amendment Report. The assessment concluded that the remnants of the Oakley Estate and the Wishing Well are considered to have heritage significance at a local level.

5. The condition and maintenance of the homestead, including 'making safe' works to Oakley Estate homestead by Defence (removal of unstable elements (such as the timber frame which supported the roof which blew completely off in a storm event) and removal of asbestos additions to the homestead based on photographs taken by Iris for *Appendix G (Landscape character and visual impact assessment addendum)* in October 2025) have significantly reduced its value as an item of built heritage. While still an extant structure, the homestead is essentially a ruin. The hayshed has either collapsed or has been demolished, and the only building still standing in any kind of integrity is the garage, which is also in a very dilapidated condition. As such, its values are largely archaeological. While there remains a setting within which the homestead and outbuildings sit, the importance of this has been considerably reduced because the other elements are either no longer standing or are in a severely poor condition, and the more intact values are subsurface archaeological resources. The current dilapidated and damaged condition of the Oakley Estate homestead and other former outbuildings have resulted in a reduced level of heritage significance, downgraded to local heritage significance at most.
6. The primary values of Oakley Estate in its current condition have been reassessed in *Appendix J (Historic heritage impact statement addendum)* of the Amendment Report to be archaeological. While the setting still has some value, it has been significantly reduced by the loss of the homestead and outbuildings. The photomontage prepared as part of *Appendix G (Landscape and visual impact assessment addendum)* demonstrates proposed locations of towers and wires. While the presence of the towers alters the landscape setting and views to and from the site, there is no mass visual obstruction due to the nature of the structures. Indirect impacts were assessed to remain as moderate. For the items identified by NSW EH:
 - a) The address for ID251 is correctly listed in *Technical Report 3 – Landscape character and visual impact assessment* as 478 Putty Road, Mount Thorley. ID2918 is located on an easement affected property and was incorrectly included in the assessment tables in *Technical Report 3 – Landscape character and visual impact assessment*. Being easement affected, this dwelling should be excluded from the visual assessment. The *Transmission Guideline Technical Supplement for Landscape and Visual Impact Assessment* (Technical Supplement) states, 'If a private landholding would host the proposed transmission infrastructure, and therefore be affected by an easement, then private receivers on that land need not be assessed in accordance with this document.'
 - b) In accordance with the assessment methodology presented in *Technical Report 3 – Landscape character and visual impact assessment*, a proportionate visual assessment process is followed in which different assessment methods are applied. The intermediate assessment uses a bare earth render (wireframe) of the project and landform (without screening by intervening vegetation) to calculate the potential magnitude of change and a worst case potential visual impact level. For the detailed assessment, the magnitude of change is calculated using a 3D modelled image that incorporates vegetation using LiDAR point cloud data, in accordance with the Technical Supplement. (Access approval to the property was not provided therefore a site visit was not possible.) The magnitude cell count for ID251, considering the intervening vegetation, reduced to 'very low'. A 'very low' magnitude of change combined with 'high' visual sensitivity', results in a 'low' visual impact. This detailed assessment is included in *Appendix I Private dwellings detailed viewpoint assessment of Technical Report 3 – Landscape character and visual impact assessment*.

- c) The Technical Supplement determines the study area for visual impact assessment. Based on a maximum tower height of 85 metres, the visual study area for this project is 1.625 kilometres from the HTP corridor. 34 Trefolly Road, Mylies Flat is beyond the visual impact study area and was therefore not included in the assessment.
- d) The 'Stafford' homestead and 'Clifford' homestead (ruins) were not included in the visual impact within *Technical Report 3 – Landscape character and visual impact assessment* for several reasons. Under the Technical Supplement, the visual assessment is to consider impacts on dwellings, which is defined as a room or suite of rooms occupied or used as a separate domicile. The Clifford homestead is a ruin and the Stafford homestead is not habitable. Secondly, both are also located in on an easement affected property. Views from easement-affected dwellings are excluded from the visual impact assessment in accordance with the Technical Supplement. Notwithstanding this, a site visit to the Stafford homestead has been undertaken and a photomontage prepared. This photomontage is included *Appendix G (Landscape and visual impact assessment addendum)* of the Addendum Report. An assessment was however completed by the heritage specialist to determine the impact to the visual setting of the heritage item in the *Technical Report 7 – Historic heritage impact statement* of the EIS based on the site visit. This visual assessment was reassessed as part of *Appendix J (Historic heritage impact statement addendum)* of the Amendment Report using the photomontage, which anticipates the visual impact to the 'Stafford' homestead and 'Clifford' homestead (ruins) to be moderate. This is consistent with the findings in the EIS.

8.2.3 Maritime archaeology

Summary of issue

- 7. Heritage NSW notes that the Hunter region in which the project area is located is known for its recorded maritime activity related to European settlement. We note further that the project impact footprint includes several river and stream crossings. In consideration of this, *Technical Report 7 – Historic heritage impact statement* of the EIS should be updated to consider maritime heritage constraints, particularly located in riverbeds and/or riverbanks.
- 8. If maritime heritage constraints are identified, *Technical Report 7 – Historic heritage impact statement* of the EIS should be updated to include a consideration of the potential impact of the proposed works on such constraints. If impacts are identified, further assessment in the form of a Maritime Archaeological Assessment (MAA) may be required.

Response

7/8. As outlined in section 4.2 of *Appendix J (Historic heritage impact statement addendum)* of the Amendment Report, the potential heritage significance study reviewed secondary sources and historical maps and plans in order to identify any activity areas which may hold maritime archaeological resources. None were identified as part of the study.

8.2.4 Impact assessment mitigation measures

Summary of issue

9. The impact assessment should consider that all heritage items within the project impact footprint will be subject to direct impacts, until the impacts are refined as part of detailed design. A revised impact assessment may be required following issue of detailed design impacts.
10. The impact assessment should include mapping that clearly identifies curtilages of built heritage items and areas of archaeological sensitivity overlaid with the project impact area boundary. If possible, please also provide these as GIS data files to Heritage NSW.
11. Table 7.1 (HH4) and Section 7.2.1.2 should be updated to consider all potential ancillary subsurface impacts of the proposed works, including access trail upgrades, vegetation clearance, construction of towers, laydown areas, switchboard areas, fencing, existing line upgrades etc.
12. If applicable, the impact assessment should identify any items of significance that should be avoided as part of the proposed works.
13. Heritage NSW notes that the project impact area overlaps with lands managed and controlled under a range of approvals, including Mining Leases, longstanding Major Project and SSD Approvals, a number of wind farm projects as well as land management by NPWS, Forestry Corporation of NSW and the Department of Defense that are likely associated with active management obligations and requirements. If applicable, proposed mitigation measures should consider any obligations to existing approvals and/or land management for built heritage and non-Aboriginal archaeology to ensure compliance and consistent management.
14. Section 7.2.1.3 should be updated to reference *Guidelines for preparing archival recordings of heritage items* as a condition of consent (DECCEEW, 2025)

Response

9. A review of impacts for the amended project was undertaken for items and sites previously subject to impact assessment in *Technical Report 7 – Historic heritage impact statement* of the EIS and is included in *Chapter 5 of Appendix J (Historic heritage impact statement addendum)* of the Amendment Report. The new locations assessed to hold, or possibly hold, heritage significance were also subject to an impact assessment. It was assumed that the entirety of the amended project impact area, including any heritage items, historic heritage value sites and activity areas with archaeological or built elements of heritage, or possible heritage, significance contained within, would be subject to direct impacts. Mitigation measures have been updated based on the results of the impact assessment which will be managed via a HHMP.
10. Mapping in *Appendix J (Historic heritage impact statement addendum)* of the Amendment Report includes curtilages of heritage items, historic heritage value sites, and newly identified locations assessed to hold heritage significance or possible heritage significance with the amended project impact area overlain. GIS data files will be provided to Heritage NSW.
11. As identified in response to item 10, mapping has been provided in *Appendix J (Historic heritage impact statement addendum)* of the Amendment Report. The amended project impact area incorporates the impact area for all components of the project and ancillary construction works such as access tracks, switching stations, transmission towers, construction support sites, vegetation clearance and laydown areas. The assessment of heritage impacts for amended

project includes consideration of all components of the project. Mitigation measure HH4 has been updated to include all locations assessed in *Appendix J (Historic heritage impact statement addendum)* of the Amendment Report to hold, or possibly hold, heritage significance that would be impacted by any subsurface or ground disturbing works associated with the amended project.

12. Mitigation Measure HH4 notes that where possible ground disturbance will be avoided for the noted locations. Mitigation measure HH2 identifies specific heritage items around which an exclusion barrier would be installed to reduce the risk of unintentional impacts to heritage values.
13. A review of other major projects has been undertaken and cumulative impacts considered in section 5.2.3 of *Appendix J (Historic heritage impact statement addendum)* of the Amendment Report. Where available, previous and existing documents that outline the management and/or mitigation of impacts to the cultural assemblage within the project impact area have now been reviewed. In most instances, minor modification to mitigation measures HH1, HH2, HH7 and HH8 in section 9.5 of *Appendix J (Historic heritage impact statement addendum)* of the Amendment Report has been adopted to align with established processes and to avoid any conflict.
14. The *Guidelines for preparing archival recordings of heritage items as a condition of consent* (NSW DCCEEW 2025) have been referenced in *Appendix J (Historic heritage impact statement addendum)* of the Amendment Report and mitigation measure HH1 (refer to *Appendix D (Updated mitigation measures)* of the Amendment Report).

8.2.5 Post-approval considerations

Summary of issue

15. Prepare an Archaeological Research Design and Excavation Methodology in accordance with *Archaeological Assessments* (Heritage Office and Department of Urban Affairs and Planning, 1996) to guide archaeological excavations (including test excavations); the Archaeological Research Design and Excavation Methodology should:
 - a. identify research questions for the archaeological program
 - b. set out methodology and sampling strategy for test excavations
 - c. include an artefact discard policy and procedure
 - d. Include clear triggers and hold points for substantially intact (and, if present, State significant) archaeological deposits/relics, allowing consideration of redesign to avoid impacts (Heritage NSW requests the opportunity to comment on the proposed management approach)
 - e. provide methodology for post-excavation analysis and reporting
 - f. include provision for an addendum if open-area salvage excavation is recommended, detailing proposed salvage scope and methods in consultation with Heritage NSW
 - g. include consideration of integrating Aboriginal cultural heritage requirements during excavation of the Wishing Well site.

Response

15. The *Appendix J (Historic heritage impact statement addendum)* of the Amendment Report includes the requirement for an Archaeological Research Design and Excavation Methodology (ARDEM) to be completed as part of the historic heritage management plan (mitigation measure HH1) as per updated mitigation measure HH7. Mitigation measure HH8 has been updated and now requires the ARDEM to include specifications for the Wishing Well. The ARDEM will be prepared during detailed design.

8.2.6 Nominate an Excavation Director

Summary of issue

16. Nominate a suitably qualified and experienced excavation director for test excavations in accordance with Criteria for Assessing Excavation Directors and submit the ARDEM and nomination to Heritage NSW for approval prior to commencement of test excavations
17. The ARDEM and nominated Excavation Director should be submitted to Heritage NSW for approval prior to the commencement of test excavations.

Response

16/17. The *Appendix J (Historic heritage impact statement addendum)* of the Amendment Report includes the requirement for an ARDEM to be completed as part of the historic heritage management plan (mitigation measure HH1) as per updated mitigation measure HH7. The ARDEM will be prepared during detailed design.

8.2.7 Assessment bilateral agreement between NSW and the Commonwealth

Summary of issue

SSI-70610456 is a controlled action under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) and assessment is to be made under the bilateral agreement between the NSW and Commonwealth Governments. The relevant controlling provisions are listed threatened species and communities (sections 18 and 18A) and Commonwealth land (sections 26 and 27A).

In regard to listed threatened species and communities, we recommend that advice be sought from agencies with the relevant expertise.

In regard to potential heritage impacts on Commonwealth land, we note that proposed action will partially take place within the SMA which is designated Commonwealth land. Within the SMA there are two heritage places that are situated within the project impact area (Murinbin House complex and Oakley Estate) that retain above-ground structures that would potentially be impacted by the proposed works. We note the following:

- Murinbin House complex is listed on the CHL as Place ID 105642. *Technical Report 7 – Historic heritage impact statement* of the EIS assesses that the SSI would result in minor indirect impacts on this item. Heritage NSW agrees with this assessment
- Oakley Estate is assessed to be of State significance. *Technical Report 7 – Historic heritage impact statement* of the EIS assesses that 'The proposed transmission line and towers would alter the setting of the site and have permanent visual changes', and this would result in a

moderate indirect impact on the item. The impact assessment presented in *Technical Report 7 – Historic heritage impact statement* of the EIS indicates that an HTP tower would be located in close proximity to the item to facilitate the HTP corridor turning to the north, and that this would significantly impact the setting of the item. In order to minimise heritage impacts on the Oakley Estate, it is recommended that consideration be given to relocating the HTP corridor away from the heritage item

- *Technical Report 7 – Historic heritage impact statement* of the EIS also assesses that there would be minor direct impacts on Oakley Estate (built fabric) related to access track works. Heritage NSW agrees with this assessment.

Response

Technical Report 1 – Biodiversity development assessment report of the EIS and *Appendix E (Revised biodiversity development assessment report)* of the Amendment Report have been informed by consultation with NSW DCCEEW and Commonwealth DCCEEW on listed threatened species and communities, where relevant.

Appendix J (Historic heritage impact statement addendum) of the Amendment Report were prepared in accordance with the *Guidelines for preparing a statement of heritage impact* (DPE 2023a) and *Actions on, or impacting upon, Commonwealth land, and actions by Commonwealth agencies. Significant impact guidelines 1.2* (DSEWPC 2013). EnergyCo notes Heritage NSW's agreement with *Technical Report 7 – Historic heritage impact statement* of the EIS assessment.

8.3 DCCEEW – Conservation, Programs, Heritage and Regulation

DCCEEW – Conservation Programs, Heritage and Regulation Group (CPHR) submitted a response to the public exhibition of the EIS, dated 24 September 2025, which focused on a review of *Technical Report 1 – Biodiversity development assessment report*.

EnergyCo and CPHR adopted a partnered approach to the development of *Appendix E (Revised biodiversity development assessment report)* of the Amendment Report for the Hunter Transmission Project. This approach was undertaken to maximise avoidance and minimisation of biodiversity impacts and to resolve complex technical issues early.

As part of this process, EnergyCo and CPHR participated in several workshops to review and agree:

- survey effort and methods
- candidate species
- land categorisation
- partial impact assumptions
- species polygons
- risks of serious and irreversible impacts, particularly on frog species.

Early draft material was provided to CPHR for review, enabling key issues to be identified and addressed directly within the *Appendix E (Revised biodiversity development assessment report)* of the Amendment Report. *Appendix E (Revised biodiversity development assessment report)* of the Amendment Report reflects this joint work and has been provided to CPHR, with the majority of issues raised through the EIS advice addressed through these revisions.

CPHR's formal advice on the exhibited EIS is acknowledged and responded to below, however, EnergyCo notes that CPHR's focus has been on *Appendix E (Revised biodiversity development assessment report)* of the Amendment Report, which provides a more complete and robust assessment of biodiversity impacts. Responses below should be read in conjunction with *Appendix E (Revised biodiversity development assessment report)* of the Amendment Report, which reflects the outcomes of this collaborative process.

8.3.1 Land category assessment

Summary of issue

Recommendation 1: Ensure *Technical Report 1 – Biodiversity development assessment report* of the EIS addresses issues with land categorisation

CPHR notes that:

- Land on which critically endangered (CE) flora species or CE ecological communities (CEEC) should be designated as Category 2 land. This should consider the six species in *Table 1 (refer to the CPHR submission)*.
- PCT 3314 is associated with the Box Gum Woodland CEEC and has been recorded in the alignment. If the plant community type (PCT) is the CEEC, this area must be considered Category 2 land.
- Only land that contains low conservation value grasslands under section 60H (2)(a) of the *Local Land Services Act 2013* (LLS Act) or low conservation value groundcover under section 109(1) of the LLS Regulation can be designated as Category 1 land. Clarify the use of the interim Grasslands and other Groundcover Assessment Method (IGGAM) on Category 1 land, including stratification, sampling intensity, provision of site-based field assessment, and outputs from the IGGAM Calculator.
- Two EPBC Act-listed CEECs (Warkworth Sands Woodland of the Hunter Valley CEEC and the Central Hunter Valley Eucalypt Forest and Woodland CEEC) are considered in section 4.1.3.4 of *Technical Report 1 – Biodiversity development assessment report* of the EIS. If a CEEC is only listed under the EPBC Act, it does not need to be considered in the land category assessment. Areas that are Category 2 land in *Technical Report 1 – Biodiversity development assessment report* of the EIS that are mapped as Category 1 land on the draft Native Vegetation Regulatory (NVR) Map due to the presence of EPBC Act-listed CEECs can be considered Category 1 land.
- Two CE flora species which are listed under the EPBC Act and not the BC Act were considered for further assessment in *Technical Report 1 – Biodiversity development assessment report* of the EIS. *Brachyscome brownii* was recorded in the alignment and *Prasophyllum sp. Wybong* was assumed present. The Australian Government may recommend separate assessment for these entities in Category 1 land.

- The spatial data shows areas mapped as Category 2 land on the transitional NVR Map have been re-categorised as Category 1 land. The transitional NVR map is enforceable and a NVR Map review is required to change land categorisation. The Biodiversity Assessment Method 2020 (BAM) must be applied in any areas that are not re-categorised following the formal map review process.
- The draft regulatory map should be used to identify land category, rather than proposing alternative methods (section 4.1.3.7 of *Technical Report 1 – Biodiversity development assessment report* of the EIS). This should include areas with scattered trees (see examples in Figures 1 and 2 of the CPHR submission). Seeking a formal NVR Map review is recommended if seeking to assess land as Category 1 land when it appears on the map as Category 2 land to minimise uncertainty.
- Existing roads in the alignment mapped as Category 2 land on the draft NVR Map have been re-categorised as Category 1 land in *Technical Report 1 – Biodiversity development assessment report* of the EIS. Instead, the existing road width should be mapped as PCT 0 and no further assessment required.
- *Technical Report 1 – Biodiversity development assessment report* of the EIS must independently assess land categorisation in the Hunter Valley Operations North Open Cut Coal Continuation Project (HVOCCP) which intersect with HTP (section 4.1.3.5 of *Technical Report 1 – Biodiversity development assessment report* of the EIS). The HVOCCP land categorisation assessment is not part of an approved development.
- For existing transmission lines, these should be assessed under the BAM unless there are previous approvals (section 4.1.3.6 of *Technical Report 1 – Biodiversity development assessment report* of the EIS) rather than being treated as SP2 Infrastructure excluded from the LLS Act.
- If clearing proposed for this project aligns with approved management practices within existing transmission line easements, the relevant areas can be excluded from assessment. Otherwise, land within the existing transmission line easements that is proposed to be cleared as part of this project should be assessed.
- Assess 82 ha of ‘excluded land’ under the BAM and reflect in *Technical Report 1 – Biodiversity development assessment report* of the EIS (Part 5A of the LLS Act does not apply to excluded land, so the BAM must be applied in these areas).
- Provide explanation of approvals used to exclude land (Figure 14.6 in *Technical Report 1 – Biodiversity development assessment report* of the EIS).
- Areas mapped as Category 2 land on the transitional NVR Map should be assessed and included in *Technical Report 1 – Biodiversity development assessment report* of the EIS unless there is further explanation (see Figure 3 in the CPHR submission).

Response

Land categorisation was a key issue addressed through the EnergyCo–CPHR workshops. Table 8-1 of this Submissions Report outlines how and where Appendix E (*Revised biodiversity development assessment report*) of the Amendment Report responds to CPHR advice on land categorisation.

Table 8-1 Land categorisation response

Matter	Response	Where addressed in Appendix E (Revised biodiversity development assessment report)
Designation of Category 2 land containing critically endangered flora and ecological communities	Section 4.1.3.4 of Appendix E (Revised biodiversity development assessment report) has been updated to correctly designate Category 2 land where critically endangered flora species and ecological communities are present.	Section 4.1.3.4
PCT associations and categorisation for PCT 3314	PCT 3314 has been updated with correct associations and categorisation.	Section 4.3.1.9
Treatment of low conservation grassland and use of IGGAM	In determining Category 1 land, the project adopted the draft native vegetation regulatory map, incorporating the mapping of Category 1 – exempt land. The only amendments to this Category 1 – exempt land mapping were where field verification identified native vegetation. Where this occurred, the draft mapping was amended and the patch assigned to a native vegetation PCT. No areas were added to mapping of Category 1 – exempt land.	Section 4.1.3.6 Spatial data / GIS
Potential inclusion of Warkworth Sands CEEC	Further research, field verification, expert advice and consultation with the Commonwealth DCCEE were undertaken to exclude sections of the Warkworth Sands CEEC.	Section 4.1.3.4
Presence of critically endangered flora species within Category 1 land	Additional survey and field verification were undertaken to exclude <i>Brachyscome brownii</i> and <i>Prasophyllum</i> species from Category 1 land.	Section 4.1.3
Category 2 land not allocated a PCT in spatial data	All spatial data has been amended to ensure Category 2 land is allocated an appropriate PCT.	Spatial data / GIS
Treatment of excluded lands mapping	Appendix E (Revised biodiversity development assessment report) report has adopted the draft native vegetation regulatory map for excluded lands.	Section 4.1.3
Mapping and dimensions of existing roads	Existing roads have been remapped as PCT 0, with road dimensions adjusted in specific sections where required.	Section 4.1.2
Complex approval framework for Hunter Valley Operations	Hunter Valley Operations approvals were not relied upon for the application of Category 1 land.	Section 4.1.3

8.3.2 Biodiversity assessment and data audit

Summary of issue

Recommendation 2: address inconsistencies in the spatial data, BAM Calculator and BDAR to ensure an accurate credit obligation is identified

CPHR notes that:

- the spatial data, BDAR and BAM-C data are misaligned for some species (see *calculations presented in Table 2 and 3 of the CPHR submission*). Review species polygon disturbance areas and ensure all data sets align
- for species assumed to be present and where the unit of measure is ‘counts of individuals’, provide evidence-base (e.g. based on reference sites or literature) for the estimates in *Technical Report 1 – Biodiversity development assessment report* of the EIS. These figures have been provided under *Tables 8.14 to 8.16 and Tables 10.4 to 10.6 in Technical Report 1 – Biodiversity development assessment report* of the EIS, but it is unclear how these have been calculated. Discrepancies between counts for all count species are shown in *Table 4 of the CPHR submission*
- address inconsistencies in data for Hunter IBRA subregion – there are inconsistencies in vegetation zone and patch size areas presented in *Technical Report 1 – Biodiversity development assessment report* of the EIS, BAM-C, and spatial layers. This affects the biodiversity credits and the list of candidate species generated in the BAM- C
- data in Table 4.79 of *Technical Report 1 – Biodiversity development assessment report* of the EIS, and data entered in the BAM-C, do not match the spatial data (ECO_WSP_FieldVerifiedVegetation_Dist_250623_GDA2020z56.shp) (refer to *Table 5 of the CPHR submission*)
- section 4.4 of *Technical Report 1 – Biodiversity development assessment report* of the EIS states that all vegetation zones have been assigned a patch size of >100 hectares. However, vegetation zone 3314_Poor records a patch size of 50 hectares in both *Table 4.79 of Technical Report 1 – Biodiversity development assessment report* of the EIS and in the BAM-C. There are inconsistencies between patch sizes in *Table 4.79* and the BAM-C for Hunter IBRA subregion. The following six vegetation zones have patch sizes of >100 hectares in *Table 4.79*, but have patch sizes of 50 hectares entered in the BAM-C: 3314_Thinned, 3314_Disturbed grasslands, 4431_Poor, 4015_Thinned, 4015_Derived, 4089_Poor.

Response

The spatial data associated with the HTP is extensive. In response to identified inconsistencies, a comprehensive review of all spatial data was undertaken to ensure consistency between the spatial datasets, the biodiversity assessment and the BAM Calculator. In addition:

- count densities in *Table 5.22 of Appendix E (Revised biodiversity development assessment report)* have been amended to a more conservative estimate of 10 individuals per hectare for all species
- inconsistencies relating to Hunter IBRA subregion patch sizes have been corrected to ensure consistency
- *section 4.4 and Table 4.79* have been updated in *Appendix E (Revised biodiversity development assessment report)* to ensure consistency.

Summary of issue

Recommendation 3: ensure consistency in vegetation zone areas and patch sizes between spatial data, *Technical Report 1 – Biodiversity development assessment report* of the EIS, and the BAM-C and address inconsistencies as identified

CPHR notes that inconsistencies in the BAM plot data in *Technical Report 1 – Biodiversity development assessment report* of the EIS and BAM-C include:

- BAM-C plot data for structure, function and composition is sometimes inconsistent with the raw floristic data
- plants listed in the floristic plot data have not been identified to species, are duplicated, or contain descriptive information rather than a scientific species name making it unclear if the correct growth form has been allocated. At a minimum ensure all species are identified to genus (species where possible) and assigned to the correct growth form
- benchmark data has been incorrectly entered (e.g. benchmark data in the Yengo BAM-C for PCTs 3239 & 3489)
- some BAM plots have a litter score of zero. Litter cover plots have not been included in the raw data, only the average has been provided
- BAM plots have been allocated to PCTs in *Technical Report 1 – Biodiversity development assessment report* of the EIS however the raw BAM plot data has not been included in Appendix D of *Technical Report 1 – Biodiversity development assessment report* of the EIS (e.g. DL-03, DL-19, DL-27, DL-51, HTP-MS- 53, Q46)
- inconsistencies with references to BAM plots in Section 4.2 and Tables 4.77-4.79. BAM plots DL-79 and DL-50 have been entered into the Hunter IBRA subregion BAM-C case for PCT 4015 ‘Derived’, although Section 4.2 of *Technical Report 1 – Biodiversity development assessment report* of the EIS allocates DL-27 and DL-50 to this vegetation zone
- BAM plot DL-27 is absent from Appendix D and BDAR Tables 4.77-79, but present in the data package (plot to PCT tool and BAM plot data spreadsheet). The BAM plot entered into the BAM-C, DL-79, is listed in Appendix D and BDAR Table 4.79 but is absent from BDAR section 4.2 and the plot to PCT tool
- BAM plots have been undertaken but not included in the assessment. For example, BDAR Section 4.2 states PCT 4039 ‘Mod-good’ relies on BAM plots DL-41 and DL-51, however only DL-41 has been entered into the BAM-C
- BAM plots have been undertaken and referred to in *Technical Report 1 – Biodiversity development assessment report* of the EIS but benchmark data has been entered into the BAM-C (e.g. DL-03, DL-19, DL-20, TS-18, DL-61)
- review and update BAM plot data to ensure consistency across *Technical Report 1 – Biodiversity development assessment report* of the EIS and BAM-C and ensure benchmark data is correctly applied
- review the vegetation chapter and update all inconsistencies with BAM plot and PCT references including Tables 4.77-4.79
- update Table 2.2 to include all BAM plot data collected outside the subject land. Ensure justification for use is provided for each plot as per Remote Access Guidance.

Response

A complete data audit and review has been undertaken to ensure consistency across vegetation zones, *Appendix E (Revised biodiversity development assessment report)* and the BAM-C. All inconsistencies have been updated as outlined in *Table 8-2* of this Submissions Report.

Table 8-2 Consistency Review/ Data Audit (BAM plot data, vegetation zones, BAM-C, BDAR)

Matter	Response	Where addressed in <i>Appendix E (Revised biodiversity development assessment report)</i>
Consistency between BAM plot structure, function and composition data and raw floristic data	Plots and the BAM-C have been reviewed and updated to include raw floristic data including structure, function and composition.	<i>Appendix D</i> <i>BAM-C</i>
Identification of all plants in floristic plot data to genus (species where possible) and correct growth form allocation and duplication and clarity issues.	Floristic plot data has been reviewed and updated to remove duplications, amend naming conventions, and assigned to a correct growth form.	<i>Appendix D</i>
Correction of incorrectly entered benchmark data in the BAM-C (e.g. Yengo PCTs 3239 and 3489)	Benchmark data has been reviewed and updated to ensure it is entered correctly.	<i>Appendix D</i>
Resolution of BAM plots with litter scores of zero and inclusion of litter cover plot data	Litter plots have been added to raw data in addition to the average score.	<i>Appendix D</i>
Inclusion of raw BAM plot data in <i>Appendix D</i> for all plots referenced in <i>Technical Report 1 – Biodiversity development assessment report</i> of the EIS	All BAM plots have been reviewed and updated to ensure they are correctly allocated to PCTs, including the referenced plots referenced.	<i>Appendix D</i>
Alignment of BAM plot references between <i>Section 4.2</i> and <i>Tables 4.77–4.79</i> of <i>Technical Report 1 – Biodiversity development assessment report</i> of the EIS	BAM plots have been reviewed and updated to ensure consistency including plots referenced in advice.	<i>Section 4.2</i> and <i>Tables 4.77 to 4.79</i>

Matter	Response	Where addressed in Appendix E (Revised biodiversity development assessment report)
Resolution of inconsistencies relating to BAM plots DL-79, DL-50 and DL-27 across <i>Technical Report 1 – Biodiversity development assessment report</i> of the EIS, BAM-C and plot-to-PCT tools	Appendix D has been updated to ensure all BAM plots are correctly identified and referenced.	Appendix D and Tables 4.77 to 4.79
Inclusion of all BAM plots undertaken but not previously included in the assessment	BAM plots have been reviewed and anomaly BAM plots have been corrected, including the removal of DL-51.	Section 4.2
Correction where benchmark data has been entered in the BAM-C instead of plot data (e.g. DL-03, DL-19, DL-20, TS-18, DL-61)	A full review has been undertaken to ensure benchmark data is consistent across Appendix E (Revised biodiversity development assessment report) and BAM C including the referenced plots.	Appendix D
Review and update of BAM plot data to ensure consistency across <i>Technical Report 1 – Biodiversity development assessment report</i> of the EIS and BAM-C	Appendix E (Revised biodiversity development assessment report) and BAM -C have undergone a full consistency review.	Appendix D
Update of Tables 4.77–4.79 to reflect corrected BAM plot and PCT information	Tables have been updated to ensure the vegetation chapter, BAM plot data and PCT information is consistent.	Tables 4.77 to 4.79
Update of Table 2.2 to include all BAM plot data collected outside the subject land, Justification for use of BAM plots collected outside the subject land in accordance with Remote Access Guidance	Table 2.2 has been updated and moved to Appendix D in Appendix E (Revised biodiversity development assessment report). The justification for plot use in remote access guideline has been updated.	Appendix D

8.3.3 Correct current and future VI scores in *Technical Report 1 – Biodiversity development assessment report* of the EIS

Summary of issue

Recommendation 4: Review and update VI scores in Table 8.7 for ‘before development’ and total clearing areas, and reflect agreed approach to calculate partial loss in ‘after development’ VI scores in Table 8.7

CPHR notes that errors were identified with VI scores in Table 8.7 of *Technical Report 1 – Biodiversity development assessment report* of the EIS (3250 mod-good, 3581 mod-good) when compared against the BAM-C for the before-development scenario. A detailed review of ‘after development’ scores where partial loss is proposed has not been undertaken due to outstanding queries from CPHR on the approach to calculate partial loss and errors found during the data analysis.

Response

The approach to assessing partial biodiversity impacts (disturbance area B) was discussed and agreed with CPHR through the HTP workshops. As a result, the partial loss methodology has shifted from a percentage-based reduction to a vegetation integrity (VI) score-based approach. Section 8 and Appendix M of Appendix E (*Revised biodiversity development assessment report*) has been updated to reflect this agreed methodology and its application under the BAM, and the BAM-C has been updated.

8.3.4 Address Lowland Rainforest NSW North Coast and Sydney Basin Bioregion EEC

Summary of issue

Recommendation 5: Further consider and explain if PCT 3029 meets the alliances of the Lowland Rainforest NSW North Coast and Sydney Basin Bioregion Endangered Ecological Community (EEC), considering the characteristic species present on site and comparing against paragraph 2 of the NSW Threatened Species Scientific Committee final determination

Response

PCT 3029 has been reviewed against the Lowland Rainforest NSW North Coast and Sydney Basin Bioregion EEC, including consideration of characteristic species present on site and comparison with paragraph two of the NSW Threatened Species Scientific Committee final determination. Further justification is provided in section 4.2.3.4 of Appendix E (*Revised biodiversity development assessment report*) of the Amendment Report demonstrating that PCT 3029 does not meet the EEC listing criteria.

8.3.5 Avoid and minimise

Summary of issue

Recommendation 6: Method for reducing offset obligations from reduced impacts during construction or operation (micro-siting) need to be finalised and documented

CPHR notes that this will need to address:

- clearing cannot exceed the clearing limits within *Technical Report 1 – Biodiversity development assessment report* of the EIS
- *Technical Report 1 – Biodiversity development assessment report* of the EIS should clarify proposed micro-siting will be confined to the biodiversity study corridor
- a maximum micro-siting distance
- the micro-siting methodology should identify a hierarchy of avoidance to biodiversity values.

Section 7.2 of *Technical Report 1 – Biodiversity development assessment report* of the EIS states that monitoring and tracking of the total predicted clearing value against the limits will occur during construction. If an increase in clearing values leads to biodiversity impacts which exceed that assessed in *Technical Report 1 – Biodiversity development assessment report* of the EIS a modification to the project approval (if approved) is triggered. Parameters to be monitored are to be described. It is expected that monitoring will be tracked per vegetation zone.

Response

In accordance with the requirements of the *Biodiversity Conservation Act 2016* (BC Act) and BAM, EnergyCo has endeavoured to exemplify avoidance and minimisation at route alignment/refinement stage, design stage and this will continue through construction and delivery stages.

Sections 7.5 and 8.4.5 of *Appendix E (Revised biodiversity development assessment report)* of the Amendment Report describes the process that will be carried out during micro-siting to continue to avoid and minimise impacts on biodiversity values.

Section 8.5.2 of *Appendix E (Revised biodiversity development assessment report)* of the Amendment Report describes the monitoring program that will be carried out so that clearing limits are complied with and no inadvertent impacts to PCTs, TECs or threatened species occurs.

Commitments to micro-siting and monitoring are also reflected in the updated mitigation measures (refer to *Appendix D (Updated mitigation measures)* of the Amendment Report). In particular:

- mitigation measure B2 states that a hierarchy of biodiversity constraints will be developed and mapped to provide an overarching avoidance framework to inform micro-siting during detailed design and that micro-siting of transmission line infrastructure will be within the HTP corridor
- mitigation measure B4 states that micro-siting of temporary construction infrastructure will be within the biodiversity study area
- mitigation measure B14 requires the predicted clearing of native vegetation to be monitored against the recorded clearing. A revised biodiversity assessment method (BAM-C) calculation on the project's final disturbance to biodiversity post construction will be completed. Any additional credit liability identified will be met as part of the biodiversity offset scheme requirements and secured under the SODA.

Summary of issue

Recommendation 7: Mitigation measures should be revised to include disturbance within a PCT representative of an EEC or CEEC to be prioritised in areas with a VI score of <15, and include the avoidance prioritisation framework referred to in B2 point 3 in *Technical Report 1 – Biodiversity development assessment report* of the EIS

Mitigation measure B2 in Table 8.28 of *Technical Report 1 – Biodiversity development assessment report* of the EIS states that as part of avoidance of threatened species, threatened ecological communities, and particularly entities at risk of SAll, disturbance will be prioritised in areas with a vegetation integrity score of <17 as per section 9 of the BAM (2020). This measure should be expanded to include PCTs representative of an EEC or CEEC with a VI score of <15.

Mitigation measure B2 refers to developing and mapping a hierarchy of biodiversity constraints to provide an overarching avoidance prioritisation framework to inform detailed design and the biodiversity management plan. This framework should form part of *Technical Report 1 – Biodiversity development assessment report* of the EIS.

Response

Mitigation measure B2 in *Appendix E (Revised biodiversity development assessment report)* of the Amendment Report has been updated to incorporate the recommendation of prioritising disturbance in areas with a vegetation integrity score of <15 rather than <17 for EECs and CEECs.

Section 8.4 of *Appendix E (Revised biodiversity development assessment report)* of the Amendment Report includes guidance regarding areas of biodiversity value to avoid during detailed design. *Figure 14.21* also shows locations to target avoidance and minimisation of TECs, threatened species habitats and connectivity during detailed design. These will be considered during the development of a hierarchy of biodiversity constraints aligned with mitigation measure B2.

8.3.6 Prescribed and indirect impacts

Summary of issue

Recommendation 8: Ensure indirect impacts are adequately assessed

CPHR recommends to:

- clarify how indirect impacts have been incorporated into the direct impacts, as stated in section 8.2.1 of *Technical Report 1 – Biodiversity development assessment report* of the EIS, and ensure indirect impacts are considered for all areas of vegetation to be retained in disturbance areas B and HZ
- identify indirect impacts from construction and maintenance activities on retained vegetation within disturbance areas B and HZ in Table 8.19 of *Technical Report 1 – Biodiversity development assessment report* of the EIS. Describe the likely vegetation removal techniques and processes to allow a better understanding of impacts associated with areas of partial loss
- address the risk of increased public access to the transmission easement including illegal dumping and taking of firewood from areas currently not easily accessible to the public in Table 8.19. Identify the high-risk areas, if any, and how this risk will be mitigated.

Indirect impacts for disturbance area B and HZ where partial loss will occur are incorporated into the direct impact calculation in section 8.1 of *Technical Report 1 – Biodiversity development assessment report* of the EIS. Clearing activities have the potential to impact retained vegetation through removal of felled vegetation, weed and pest incursion and use of herbicides. Clearing techniques and processes have not been well described, making it difficult to quantify the impacts in disturbance areas B and HZ.

Response

Section 8.3 of *Appendix E (Revised biodiversity development assessment report)* of the Amendment Report has been substantially revised with a new approach to mitigations agreed, including a broader scope of indirect impact, removal of the 10 per cent additional credit obligation and replacement with targeted species mitigations. Potential impact as a result of increased public access and vegetation removal techniques has been assessed. The calculator has also been updated to ensure partial loss calculation are captured as direct impact.

Summary of issue

Recommendation 9: Address impacts of powerlines on threatened birds and bats

CPHR recommends to:

- update Table 8.28 to include the post-approval bird collision and EMF management and monitoring plan to identify priority areas for installation of mitigation measures, commit to install line markers in high collision risk areas and implement a robust monitoring program to assess ongoing risks.
- update Table 8.19 and Section 8.2 to include an assessment of impacts to Grey-headed Flying Foxes. The National Recovery Plan (NRP) for Grey-headed Flying Fox identifies electrocution from power lines as a threat (Tidemann 1999, Tidemann and Nelson 2011).
- include mitigation measures to manage residual impacts.

Rather than proposing an additional 10 per cent credit obligation for specific species include a commitment to effective mitigation measures for those species. Identify locations at high risk of threatened bird and bat strike in *Technical Report 1 – Biodiversity development assessment report* of the EIS and document management actions to reduce impacts. Appendix I of *Technical Report 1 – Biodiversity development assessment report* of the EIS recommends establishing a monitoring program to determine risk – this is to be added to Table 8.28 of *Technical Report 1 – Biodiversity development assessment report* of the EIS. Monitoring is to occur for at least two years post-construction and be designed to identify collision rates and areas where additional deterrents may need to be installed.

Response

The mitigation measures recommended by CPHR to address impacts of powerlines on threatened birds and bats have been adopted. Table 8.28 of *Appendix E (Revised biodiversity development assessment report)* of the Amendment Report has been updated to include a post-approval bird collision and EMF management and monitoring program, including identification of priority risk areas, commitment to installation of line markers in high-risk locations, and implementation of a robust monitoring program.

Table 8.19 and section 8.2 of *Appendix E (Revised biodiversity development assessment report)* of the Amendment Report have been updated to include an assessment of impacts to Grey-headed Flying Foxes, with consideration of the National Recovery Plan and electrocution risk from powerlines. Mitigation measures to manage residual impacts have been incorporated.

Consistent with CPHR advice, the previously proposed additional 10 per cent credit obligation has been removed and replaced with a commitment to targeted, species-specific mitigation measures.

Summary of issue

Recommendation 10: Prescribed impacts on habitat connectivity should be considered

CPHR recommends:

- prescribed impacts assessment should be updated to demonstrate that connectivity has been considered for all relevant species, including for species such as Littlejohn's Frog and Giant Burrowing Frog
- update *Technical Report 1 – Biodiversity development assessment report* of the EIS with detail on species for which connectivity measures are designed; location of connectivity measures and the type of connectivity measure proposed (i.e. rope crossing, glider pole)
- update *Technical Report 1 – Biodiversity development assessment report* of the EIS to include reference to compensatory habitat and species targeted.

Rather than proposing an additional 10 per cent credit obligation for specific species include commitment to strong mitigation measures for those species likely to be impacted by a loss of connectivity. This should be included in the Connectivity Strategy proposed in Table 8.28. While the strategy will be completed in the post-approval phase, associated mitigation measures and any compensatory measures should form part of *Technical Report 1 – Biodiversity development assessment report* of the EIS.

Response

This recommendation has been adopted. The previously proposed additional 10 per cent credit obligation has been removed and replaced with targeted, species-specific mitigation measures.

Appendix E (Revised biodiversity development assessment report) of the Amendment Report has been updated to assess connectivity for species, including Littlejohn's Frog and Giant Burrowing Frog. Project design changes were undertaken to increase avoidance and minimisation of impacts to frog habitat, including avoidance of key waterways and implementation of buffer areas.

Connectivity measures have been incorporated into *Appendix E (Revised biodiversity development assessment report)* of the Amendment Report (Table 8.28), including reference to compensatory habitat proposed to support habitat connectivity for frog species.

Early conservation actions developed in collaboration with the Save Our Species program (CPHR) have been incorporated to support the resilience of frog populations. A recognised frog species expert was engaged to help inform the assessment and mitigations.

Summary of issue

Recommendation 11: Prepare a biodiversity management plan prior to commencement of operation to address the ongoing maintenance to ensure mitigation measures proposed in *Technical Report 1 – Biodiversity development assessment report* of the EIS are implemented. The requirement for a biodiversity management plan should be included as an approval condition in the determination.

Mitigation measure B17 states that guidelines and procedures will be developed and implemented as part of the network operator's environmental management system which include management of vegetation maintenance and areas of high biodiversity value. These are to identify the ongoing maintenance of disturbance area B and HZ; mitigation measures specific to HTP such as those relating to connectivity, nest boxes and other measures to reduce threatened bird and bat strike.

A biodiversity management plan is to be developed to ensure the ongoing risks to biodiversity throughout operation identified in *Technical Report 1 – Biodiversity development assessment report* of the EIS are mitigated.

Response

Section 8.4.3 of *Appendix E (Revised biodiversity development assessment report)* of the Amendment Report describes the proposed approach to management of biodiversity values during operation. Operation of the HTP would be managed through the accredited environmental management system (EMS) maintained by the network operator.

An update has been made to mitigation measure B17 (refer to *Appendix D (Updated mitigation measures)* of the Amendment Report) to specify that an operational biodiversity management plan (or similar) will be prepared to assist with operational biodiversity management requirements, which would be incorporated into the network operator's EMS.

8.3.7 Private land conservation agreements

Summary of issue

Recommendation 12: Where impacts to private land conservation agreements are unavoidable consult with the BCT

The development footprint overlaps with areas mapped on the NSW Private Land Conservation Agreements spatial layer, including Saddlers Creek Conservation Area and Broke Road Offset Area. Prioritised avoidance of these areas and, if avoidance cannot be achieved, discuss with BCT.

Response

The disturbance area has been reviewed to ensure that no offset areas are impacted including complete avoidance of Saddlers Creek Conservation Area and Broke Road Offset Area. These were spatial data issues in *Technical Report 1 – Biodiversity development assessment report* that have since been corrected for *Appendix E (Revised biodiversity development assessment report)* of the Amendment Report.

8.3.8 Matters of National Environmental Significance

Summary of issue

Recommendation 13: Include relevant information on MNES

CPHR recommends to:

- update the MNES assessment in Appendix C of *Technical Report 1 – Biodiversity development assessment report* of the EIS to provide all information required to complete the bilateral assessment as provided in Attachment B (*refer to CPHR submission for Attachment B – Bilateral assessment information and data (MNES matters) guidance*)
- enter all EPBC Act listed TECs into the BAM-C and ensure credit obligations are consistent between *Technical Report 1 – Biodiversity development assessment report* of the EIS, Appendix C and BAM-C
- provide additional assessment in *Technical Report 1 – Biodiversity development assessment report* of the EIS for all ten (10) Commonwealth listed TECs associated with the PCTs within the alignment. Demonstrate that relevant Commonwealth listing advice was used when mapping the extent of MNES in this assessment
- consider all relevant Commonwealth guidelines and policy statements that are applicable to the action and listed threatened species and/or communities. Where they are listed for the species in the SPRAT database, they must be considered, including:
 - National Recovery Plan for the Regent Honeyeater (*Anthochaera phrygia*)
 - Survey Guidelines for Australia's Threatened Birds. EPBC Act survey guidelines 6.2 (Department of the Environment, Water, Heritage and the Arts (2010))
 - threat abatement plan for predation by feral cats (Department of Climate Change, Energy, the Environment and Water (2024))
 - extent of Warkworth Sands Woodland of the Hunter Valley CEEC may be underestimated – this CEEC abuts areas identified as PCT 0. Should PCT 0 be revised and a PCT assigned in a derived grassland condition, a 30 metre buffer is to be applied to these Warkworth Sands patches as per Commonwealth guidelines
- prepare an assessment of significance for all impacted MNES, including those assumed present and/or listed under the Controlled Action – an assessment of significance is required for any MNES being impacted, including species where presence is assumed and those listed under the controlled action as possibly at risk of being significantly impacted, including *Acacia bynoeana* (Bynoe's Wattle) *Thelymitra adorata* (Wyang Sun Orchid)
- provide further consideration of bird and Grey-headed flying fox species habitat fragmentation in Appendix C including potential collision with the transmission lines. The corridor is around 140 metres wide, and has the potential to change flight paths and fragment habitat
- where minimum condition thresholds for Commonwealth listed Threatened Ecological Communities (TECs) under the relevant listing advice has been met, these are correctly allocated in Tab 3 of the BAM-C.

Response

The MNES in Appendix C of *Appendix E (Revised biodiversity development assessment report)* of the Amendment Report has been updated with all information listed in the CPHR submission, including Attachment B that is required to complete the bilateral assessment. This includes an assessment of significance for listed threatened species and ecological communities that were either recorded within the subject land (amended disturbance area) or identified as having a moderate to high likelihood of occurrence.

Additionally, the Commonwealth DCCEEW has been consulted and briefed during the development of *Appendix E (Revised biodiversity development assessment report)* of the Amendment Report on key MNES matters, including:

- partial loss methodology on key species
- design changes adopted to avoid key frog habitat
- classification of Warkworth Sands TEC.

The Commonwealth DCCEEW will complete its assessment after receiving a determination from the Department of Planning, Housing and Infrastructure.

8.3.9 Flood risk management and surface water assessment

Summary of issue

Recommendation 14: Prepare detailed flood management plans for all construction sites and access tracks. These must include staging of works, scour protection, sediment and erosion controls and stabilisation of crossings

Ancillary sites (laydown areas, construction support sites, helipads) and access tracks are located on flood-affected land. Inundation up to 2.5 metres is possible at some sites (e.g. Bayswater South, Gouldsville Road, Wollombi Road A, Freemans Drive).

Risks include obstruction of local overland flow, mobilisation of sediments and materials, and safety hazards for the construction workforce.

The EIS acknowledges these risks and proposes standard measures (staging of works, scour protection, sediment and erosion controls, stabilisation of crossings), but more detailed flood management planning will be required at detailed design.

Response

The risk of flooding to construction support sites is addressed in mitigation measure FL1. Detailed construction planning will consider flood risk at all construction support sites, including:

- reviewing construction site layouts and staging construction activities in order to avoid or minimise obstruction of overland flow paths and limiting the extent of flow diversion required
- designing the layout of construction ancillary facilities and implementing stormwater management controls during their establishment in order to manage the impact of flooding on construction personnel, equipment and materials

- identifying and applying measures to not worsen flood impacts on the community and on other property and infrastructure during construction up to and including the 1 per cent AEP event where reasonable and feasible. Where warranted by the scale and nature of the proposed works this will include flood modelling and assessment to assess the extent of potential impacts and therefore the scope of mitigation measures that may be required
- measures to mitigate alterations to local runoff conditions due to construction activities.

Refer to *Appendix D (Updated mitigation measures)* of the Amendment Report for further details.

Summary of issue

Recommendation 15: Incorporate scour protection and structural measures for towers in high-velocity areas, to be confirmed during detailed design

Transmission line towers generally have a small footprint and are not expected to significantly alter flood behaviour. However, towers located near the Hunter River, Wollombi Brook and Monkey Place Creek will require scour protection and structural design to withstand high depth/velocity flooding.

Response

Mitigation measures proposed for the exhibited project, including the use of scour protection to protect transmission towers during a one per cent AEP flood event and the implementation of structural design for towers located on the floodplain to manage the risk of failure of the transmission line due to damage from flooding (mitigation measure FL11), remain applicable to the amended project. Refer to *Appendix D (Updated mitigation measures)* of the Amendment Report for further details.

Summary of issue

Recommendation 16: Incorporate stormwater basins, scour protection and a 0.5 metre freeboard for all switching station and substation platforms. Confirm appropriate mitigation at Eraring substation in consultation with Origin Energy

Switching stations and the Eraring substation extension are not within mainstream floodplains but are subject to major overland flow. Diversion channels, culverts, and a 0.5 metre freeboard above the one per cent AEP are proposed. There is potential for increased inundation depth upstream that could affect the Eraring Power Station.

There is residual risk of increased flow velocities downstream of Bayswater South and Olney switching stations, requiring scour protection and stormwater basins at outlets.

Response

The provision of a 0.5 metre freeboard to the one per cent AEP when setting the minimum bench level of new switching stations and the Eraring substation extension is identified in the adopted criteria and standards that are set out in *Technical Report 12 – Flooding impact assessment* of the EIS (mitigation measure FL15). This freeboard allows for potential increases in peak flood levels due to a range of factors including future climate change. A check would also be made during detailed design to ensure that the function of the switching stations, substation extension and transmission line infrastructure is not impacted by flooding under future climate change conditions.

Since the exhibition of the EIS and through continued consultation with Origin Energy, additional information about the existing flood conditions and existing drainage design of the Eraring substation has become available. As part of the Amendment Report, a revised assessment of potential operational impacts of the project at Eraring substation has been included. Further detail is provided in *section 5.13* and *Appendix L (Flooding impact assessment addendum)* of the Amendment Report.

As noted in management measure FL8, the impact of the Eraring substation extension on flood behaviour at the Eraring Power Station would be confirmed during detailed design. Consultation would continue to be carried out with Origin Energy to confirm the effect that any residual flood impacts could have on the operation of the Eraring Power Station for all floods up to the PMF, and to inform the scope of mitigation measures that may be required.

As noted in management measure FL10, localised increases in flow velocities around transmission line towers, at drainage outlets from the substations and switching stations, and at waterway crossings along access tracks would be mitigated through the provision of scour protection and energy dissipation measures.

As noted in *sections 6.1.1* and *6.1.2* of *Technical Report 12 – Flooding impact assessment* of the EIS, the need for stormwater basins to manage increases in flow velocities downstream of Bayswater South and Olney switching stations would be subject to detailed design.

In accordance with mitigation measure FL9, impact of the Eraring substation extension on flood behaviour at the existing Eraring Power Station will be confirmed during detailed design. Consultation will continue to be carried out with Origin Energy to confirm the effect that any residual flood impacts could have on the operation of the Eraring Power Station for all floods up to the PMF, and to inform the scope of mitigation measures that may be required.

Refer to *Appendix D (Updated mitigation measures)* of the Amendment Report for further details.

8.4 DCCEEW – Water

8.4.1 Water supply, take and licensing

Summary of issue

The Department of Planning, Housing and Infrastructure (DPHI) should request the proponent to clarify the ability to obtain the necessary water volumes of both potable and non-potable water from a viable supply via indication(s) of agreement(s) from water supplier(s). Where the water is to be sourced from a currently unauthorised source, an impact assessment and confirmation that the necessary entitlement can be obtained will be required.

Response

EnergyCo notes DCCEEW-Water's comments regarding water supply. In accordance with the SEARs, *section A.4.4* of the updated project description (refer to *Appendix A (Updated project description)* of the Amendment Report) has included estimates of the water requirements (both potable and non-potable) for construction of the project, including a water supply hierarchy for where this water would be obtained.

An updated summary of potential water supply options has been included as *Table A-19* of the updated project description, which reflects updated entitlements available to EnergyCo from surface water sources from existing water access licences (WALs). Based on this updated information, up to around 60 per cent of the project's non-potable water demand could be met by existing WALs.

The remaining water demand for construction would be sourced in accordance with the following hierarchy:

- rainwater harvesting (non-potable water)
- reuse of construction water, treated wastewater and/or groundwater inflows, where practicable (non-potable water)
- recycled water from existing wastewater treatment plants (non-potable water)
- extraction of water from surface water and/or groundwater
- reuse of treated mine water, if practicable (non-potable water). The potential use of treated mine water would be investigated during detailed design
- existing regulated and unregulated surface water sources (potable water). Potable water would be sourced from Council owned potable water supplies and/or from Hunter Water.

It is expected that the construction contractors(s) once appointed, would be responsible for obtaining agreements from water suppliers in accordance with this hierarchy. Notwithstanding this, EnergyCo has undertaken preliminary consultation with some water supplier(s) to confirm that the estimated water demand could be met, including Hunter Water and Altogether Group. A summary of consultation activities undertaken during and post exhibition of the EIS is provided in *Chapter 4 (Engagement)* of this Submissions Report.

It is expected that the construction contractor(s) (once appointed) would undertake any required impact assessment for obtaining water from a currently unauthorised source, should they choose to meet the construction water demand via this method.

8.4.2 Water access licensing

Summary of issue

The Department of Planning, Housing and Infrastructure (DPHI) should request the proponent to obtain a WAL to account for the maximum predicted water take for construction and operation activities unless an exemption applies under the Water Management (General) Regulation 2025.

Response

As detailed in *Technical Report 11 – Groundwater impact assessment* of the EIS, an amendment to the Water Management (General) Regulation 2018 came into effect on 6 June 2025, which provides an exemption from requiring a WAL for groundwater take in connection with the construction of essential infrastructure by a public authority. The exemption applies to the project as electricity generation, transmission and distribution is defined to be essential infrastructure and EnergyCo is a public authority. While a WAL is not required via this exemption, mandatory recording and reporting requirements for groundwater take still apply under this exemption.

This requirement is reflected in mitigation measure SW9 (refer to *Appendix D (Updated mitigation measures)* of the Amendment Report), which requires ‘Surface water and groundwater extracted under an exemption under the *Water Management Regulation 2025* will be recorded and reported on in accordance with regulatory requirements.’

8.4.3 Water supply work

Summary of issue

DPHI should request the proponent to provide an impact assessment of all proposed water supply work for construction and operation to access water supply for the project.

Response

DCCEEW – Water’s comments regarding water supply work is noted. Should any water supply works be identified by the construction contractor(s), once appointed, the necessary assessment(s) and approval(s) would be completed prior to any water supply works being undertaken.

As noted in *section 17.3.2* of the EIS, any potential extraction from a new surface water source (e.g. Congewai Creek and the Hunter River) would conform with extractions limits applied as part of a Water Supply Work Approval under the WM Act (refer to *Chapter 5 (Statutory context)* of the EIS for more information).

8.4.4 Scope of proposed works on waterfront land

Summary of issue

With regards to the scope of proposed works on waterfront land, as defined in the *Controlled activities – Guidelines for riparian corridors on waterfront land* (DPE Water 2022), DCCEEW requested that DPHI:

- request clarification of the scope of all proposed works on waterfront land
- request clarification of the proposed footprints of each of the following construction support sites: Wollombi Road, Hebden Road and Freemans Drive.

Response

The majority of the projects’ interactions with waterfront land are associated with vegetation clearing within the HTP corridor and access tracks (new or upgrades), with some additional minor interactions expected for installation of cross-drainage infrastructure and minor earthworks. As described in *section 17.3.4* of the EIS, clearing of vegetation within riparian corridors would be undertaken in accordance with modified and sensitive clearing methods (refer *Appendix A (Updated project description)* of the Amendment Report).

An addendum surface water impact assessment chapter has been completed as part of the Amendment Report, and is included in *section 6.11* of the Amendment Report. As part of this addendum assessment, riparian corridors at the abovementioned construction support sites were refined (compared to the approach detailed in the EIS) and considered the following:

- elevation data
- aerial imagery

- site visit during preparation of the amended surface water impact assessment (where access was possible).

Inner and outer riparian corridors at the Wollombi Road, Hebden Road and Freemans Drive were defined and are provided as *Figures 6-2, 6-3 and 6-4* of the Amendment Report.

In accordance with the *Controlled Activity Guidelines* (DCCEEW, 2025):

- construction activities in the mapped inner 50 per cent riparian zone would be avoided (with the exception of watercourse crossings and water extraction in accordance with existing water supply work approvals). These would be demarcated as no-go zones
- construction activities in the mapped outer 50 per cent riparian zone would be avoided where possible. However, if construction works cannot be avoided in these areas, they would comply with the *Controlled activities – Guidelines for riparian corridors on waterfront land* (DCCEEW 2025) (including riparian zone offsets and encroaching cleared areas only).

Any restriction to works at these construction support sites, in accordance with the *Controlled Activity Guidelines*, would apply only to the mapped riparian corridors in *Figures 6-2, 6-3 and 6-4* of the Amendment Report.

Additional mitigation measures have been provided in *Appendix D (Updated mitigation measures)* of the Amendment Report to reflect the revised mapping at the Hebden Road, Wollombi Road and Freemans Drive construction support sites.

8.5 NSW Environment Protection Authority (EPA)

NSW Environment Protection Authority (herein referred to as EPA) provided advice on public exhibition of the EIS, dated 24 September 2025. Consideration of the items raised in their advice is provided in the following sections.

8.5.1 Noise impacts

Summary of issue

The EPA recommends DPHI consider requiring preparation and implementation of a construction noise and vibration management plan (CNVMP) prior to commencement of construction activities, that includes but is not necessarily limited to:

- identification of each work area, site compound and access route (both private and public)
- identification of the specific activities that will be carried out and associated noise sources at the premises and access routes
- identification of all potentially affected sensitive receivers, and detailing any noise agreements with relevant landowners
- use quieter equipment and alternative construction methods, where possible
- schedule noisy activities to avoid multiple high-noise events occurring at the same time
- install barriers or screens where feasible
- the construction noise and vibration objectives identified in the Environmental assessment

- assessment of potential noise and vibration from the proposed construction methods (including noise from construction traffic) against the objectives identified in the Environmental assessment
- where the objectives are predicted to be exceeded an analysis of feasible and reasonable noise mitigation measures that can be implemented to reduce construction noise/vibration impacts
- description of management methods and procedures and specific noise mitigation treatments that will be implemented to control noise and vibration during construction
- procedures for notifying residents of construction activities that are likely to affect their noise and vibration amenity
- measures to monitor noise/vibration performance and respond to complaints.

The EPA also suggests DPHI consider the need for an independent Environmental Representative and/or independent Acoustics Advisor to advise on the noise and vibration components of the project, particularly due to the potential for construction noise impacts.

The EPA suggests that DPHI should note that the recommended project noise trigger levels (PNTLs) for audible transmission line noise are with an exemption if a negotiated agreement is in place, and the proposal should address any negotiated agreements as part of any approval for the project.

Response

Mitigation measure NV1 includes preparation of a noise and vibration management plan (NVMP) to provide the framework and mechanisms for the management and mitigation of all potential noise and vibration construction impacts from the amended project. The NVMP will be prepared prior to construction and will detail the mitigation measures which address the EPA's recommendation as follows:

- confirmation of nearby sensitive receivers
- confirmation of work, construction equipment and hours of work would be completed and quantify resulting impacts at sensitive receivers.
- criteria for the project and approval conditions
- using quieter equipment and alternative construction methods, scheduling noisy activities to avoid multiple high-noise events occurring at the same time, installing barriers or screens where possible (NV4)
- procedures and mitigation measures for potential impacts during out-of-hours work
- requirements for noise and vibration monitoring and assessment of potential noise and vibration from the proposed construction methods (NV5 and NV7)
- description of management methods and procedures and specific noise mitigation treatments that will be implemented to control noise and vibration during construction (NV4 and NV7)
- details of how community consultation in relation to noise and vibration would be completed
- procedures for handling complaints
- details on how respite would be applied where ongoing high impacts are expected at certain receivers.

Refer to *Appendix D (Updated Mitigation measures)* of the Amendment Report for the full list of mitigation measures.

Appendix K (Noise and vibration impact assessment addendum) of the Amendment Report considers only horizontal distance between the transmission line easement and sensitive receivers, without factoring in terrain or sound propagation, which are expected to lower noise levels at greater distances. Therefore, the residual impacts are considered indicative and likely to decrease with further detailed design of the transmission line. The assessment notes that one potentially impacted sensitive receiver is easement affected for transmission line audible noise and would be subject to exemption with a negotiated agreement in place. Potential impacts on easement affected landowners will be addressed through compensation provided to the landowner in accordance with the requirements of the *Land Acquisition (Just Terms Compensation) Act 1991*.

8.5.2 Other matters

Air quality – assessment approach

Summary of issue

The EPA recommends that the AQIA should clarify any assumptions regarding nearby residential receivers and demonstrate potential impacts to all sensitive receptors has been considered. The EPA's review indicates there are several potential rural residential dwellings in proximity of Wollombi Road that may be sensitive to air quality impacts.

Response

The air quality and greenhouse gas impact assessment (*Technical Report 18 – Air quality and greenhouse gas impact assessment*) identified sensitive receivers within 250 metres of each construction support site and laydown area in accordance with the *Guidance on the Assessment of Dust from Demolition and Construction (IAQM 2024)*.

EnergyCo confirms that the property previously recorded in the NVIA as a residential receiver near the Freemans Drive construction support site has since been acquired for the project and is no longer used as a dwelling. As such, there are no remaining sensitive receivers within the relevant buffer zone of this site, and consequently no air quality impacts are anticipated. Updated locations of sensitive receivers are outlined on the *Figure 5-2 of section 5.17 (Air quality)* of the Amendment Report.

The nearest sensitive receiver to Wollombi Road construction support site is over 400 metres away (to the west). Construction traffic would leave the Wollombi Road construction support site in a north or easternly direction. The rural residential dwellings to the west of the construction support site on Wollombi Road are within 50 metres of the road however would not experience any project related air quality impacts.

Air quality – management and mitigation

Summary of issue

To ensure construction activities are appropriately managed to minimise potential risks to ecological and human health receptors, the EPA recommends DPHI require preparation of a construction air quality management plan (CAQMP). The plan should include management measures to mitigate the risk of air quality impacts from construction activities.

Response

Mitigation measure AQ1 includes the preparation and implementation of a CAQMP. The CAQMP will include specific measures to manage dust and particulates generated during demolition, earthworks and construction in accordance with the *Guidance on the Assessment of Dust from Demolition and Construction*.

8.5.3 Waste management

Summary of issue

The EPA recommends that the applicant prepare and implement a waste management strategy in consultation with the relevant local Councils to show waste will be directed to facilities that can lawfully accept it, including:

- the capability of the waste management facilities of the relevant local government area to accept the volumes of waste predicted to be deposited and any associated approvals required to create and/or expand waste storage or disposal facilities
- any infrastructure that may be required at any waste facilities that are proposed to be created and/or expanded to receive additional volumes of waste from the project
- the EIS identifies approximately 450,000 cubic metres of spoil as unsuitable for reuse. For this material, the proponent should clearly demonstrate that all reasonable reuse and recycling options have been investigated and exhausted before proposing disposal
- the EPA recommended that waste generated by the project be managed according to the waste hierarchy, with avoidance as the priority. The submission identified the need for compliance with relevant legislation and regulations for the import, storage, treatment and disposal of waste.

The EPA requests the following matters be addressed:

- waste must be avoided where reasonably practicable, then reduced, re-used, recycled or recovered, with treatment or disposal only where these options are not feasible
- the import, storage, treatment, processing, reprocessing or disposal of waste must comply with the Protection of the Environment Operations Act 1997, the Protection of the Environment Operations (Waste) Regulation 2014, and applicable orders and exemptions
- waste should only be transported to facilities lawfully permitted to receive it, including those licensed by the EPA or operating under a resource recovery order or exemption
- all waste removed from site must be classified in accordance with the EPA's Waste Classification Guidelines, with disposal records retained for audit purposes
- a waste and resource recovery management plan must be prepared prior to operation, in consultation with the EPA and relevant councils, approved by the Planning Secretary, and include (at minimum):
 - quantities, types and sources of waste received
 - quantities, types and fates of waste produced
 - details of waste not suitable for re-use
 - identification of materials requiring a Resource Recovery Order
 - controls and procedures for compliance with any Resource Recovery Order
 - testing and monitoring procedures

- materials segregation methods, including for contaminated soils
- confirmation of capacity and approvals at receiving waste facilities
- any additional infrastructure required at waste facilities to handle project volumes.

Response

EnergyCo acknowledges the EPA's recommendations regarding waste management. Waste generated during construction, operation and decommissioning of the project would continue to be managed in accordance with the waste hierarchy of avoid, reduce, reuse and recycle before disposal, as described in *section 22.3.3 (Waste management)* and *Figure 22.3 (Waste hierarchy)* of the EIS (mitigation measure WM3). This approach is consistent with mitigation measure WM1 in which requires preparation of a Waste Management and Resource Recovery Plan (WMRRP) to identify, classify, track and manage all waste streams in accordance with the *Protection of the Environment Operations Act 1997 (POEO Act)*, *Protection of the Environment Operations (Waste) Regulation 2014* and *EPA Waste Classification Guidelines*.

The WMRRP will:

- identify, classify, track and report waste streams consistent with the *EPA Waste Classification Guidelines*
- describe how avoidance, reuse, recycling and recovery opportunities will be prioritised and implemented, consistent with the waste hierarchy (see *section 22.3.3* of the EIS)
- identify expected waste streams and estimated quantities generated during construction and operation (as outlined in *Tables 22.12 and 22.14* of the EIS)
- ensure all waste taken off-site is transported to appropriately licensed or approved facilities, or managed under a valid Resource Recovery Order or Exemption (*section 22.3.1* and *section 22.3.3* of the EIS), mitigation measure WM3
- include measures for segregation of materials, including the separation of contaminated soil and recoverable materials, with monitoring, record-keeping and auditing procedures aligned with *Chapter 20 (Soils and contamination)*, mitigation measure C8
- confirm the capacity and approvals of waste facilities proposed to receive project waste, building on the inventory of EPA-licensed facilities listed in *Table 22.11* of the EIS, mitigation measure WM2
- include procedures to verify compliance with Resource Recovery Orders and Exemptions, consistent with EPA recommendations
- should a facility identify a need to modify or expand its infrastructure, this would be managed independently by the facility operator in accordance with EPA regulatory requirements.

EnergyCo will prepare the WMRRP prior to construction and update it before operation, in consultation with the EPA and relevant councils, to ensure that EPA advice has been taken into consideration and that waste management remains compliant with current regulatory and policy frameworks.

8.5.4 Contamination

Summary of issue

To ensure construction activities are appropriately managed to minimise potential risks to ecological and human health receptors, the EPA recommends DPHI require preparation and implementation of a construction environmental management plan (CEMP). The plan should be developed in accordance with the *Guidelines for Consultants Reporting on Contaminated Land – Contaminated Land Guidelines: NSW EPA (2020)*.

This should include robust unexpected finds protocol noting the uncertainty around the presence of contaminants in soil, surface water and groundwater, especially in the high and medium risk areas identified. A soil and water management plan should also be included to prevent impacts to surface water and groundwater.

Response

EnergyCo notes the EPA's recommendation that construction activities be managed through a CEMP. Consistent with the revised environment management framework in the Amendment Report, a CEMP—including an issue-specific soil and water management plan, and contamination management plan—will be prepared following project approval in accordance with the Conditions of Approval and submitted to the Planning Secretary for approval prior to the commencement of construction. Refer to *Chapter 6 (Environmental Management)* and *Appendix D (Updated mitigation measures)* of the Amendment Report for further details.

The plan will give effect to the mitigation measures in *Appendix D (Updated mitigation measures)* of the Amendment Report, including requirements for soil and water management, contamination controls, and a robust unexpected finds protocol to address the potential for contaminants in soil, surface water and groundwater, particularly in areas identified as medium and high risk. These measures will ensure that construction risks to human health and ecological receptors are appropriately managed.

8.5.5 Relevant requirements of existing EPLs

Adequacy of the EIS

Summary of issue

It is noted that as part of the development of detailed design and construction documentation, the need for an Environmental Protection Licence (EPL) the *Protection of the Environment Operations Act 1997* may be identified, particularly for helicopter-related activities, crushing, grinding or separating, electricity generation (back-up diesel generators) or sewage treatment.

The EPA advises DPHI that the proponent is responsible for determining whether any activities trigger the requirement for an EPL and applying for the appropriate licence. The EPA recommends DPHI ensure a post-approval CEMP is implemented that addresses the relevant licence requirements for each construction area and includes provisions for continuous review of relevant details.

Response

As discussed in *Appendix C (Statutory compliance)* of the Amendment Report, an environment protection licence (EPL) may be required for the project under Chapter 3 of the NSW *Protection of the Environment Operations Act 1997* (POEO Act).

It is possible that the use of helicopters during construction may result in more than 30 flight movements per week within one kilometre of a dwelling which is listed as a scheduled activity under schedule 1 of the POEO Act. If this is the case, the project will require an EPL.

In addition, should crushing, screening or separating of material during construction be identified as required in quantities that exceed the thresholds in Schedule 1 an EPL would be required.

The EPA has also identified in its submission that activities such as electricity generation (back-up diesel generators); and sewage treatment (that are also listed as scheduled activities under schedule 1 of the POEO Act) may require an EPL.

The need for an EPL would be determined during detailed design of the HTP. If an EPL is required, the design and construct contractor(s) would be responsible for obtaining the EPL in coordination with the network operator and EnergyCo.

8.6 National Parks and Wildlife Service (NPWS)

DCCEEW –National Parks and Wildlife Service (NPWS) provided advice on public exhibition of the EIS, dated 25 September 2025. Consideration of the items raised in their advice is provided in the following sections.

Due to the length of the NPWS submission, the paragraph numbers from that submission have been replicated in the issue sections below, for ease of reference.

NPWS is seeking to ensure that environmental quality within the NPWS estate is sustained by minimising project-related impacts on visitor amenity and on air, surface water and groundwater. They specifically request that the NPWS estate be treated as a sensitive receiver – both as a public recreational area and as an ecological receiver supporting significant biodiversity – in assessing dust, noise, vibration, erosion and flow-related impacts.

8.6.1 Statutory considerations for the NPWS estate

Summary of issue

NPWS requests the following matters be addressed:

As part of the EIS addendum report:

1. consider the statutory context of the NPW Act and Forestry Act, according to the SEARs (as per Items 16 to 18), when addressing the requirements critical to enabling project authorisation under the respective Acts

2. revise referencing to the NPWS estate (as environmentally sensitive areas of state significance), explaining the context of land administration, and separating the flora reserve's description from the areas of state forest administered by the Forestry Corporation of NSW (FCNSW) to ensure transparency around project-related impact descriptions.
 - a. land reserved under Part 4 of the NPW Act as Jilliby SCA and Watagans NP, as owned by the NSW Minister for the Environment and administered under the NPW Act
 - b. land acquired by, or vested in, the NSW Minister for the Environment, and administered under Part 11 of the NPW Act as Ministerial Roads
 - c. land (Lot 165 DP755219) managed under a perpetual lease which is vested in the Minister for the Environment and managed in accordance with Part 11 of the NPW Act but which also remains part of Corrabare State Forest (refer to Item 10 below)
 - d. land declared as Corrabare North FR for a conservation purpose under s.16 of the Forestry Act, for which NPWS has been appointed the land manager, as set out in Item 6 below.
3. Clarify statutory pathways for authorisation under the NPW Act and Forestry Act. Currently, permissibility is not adequately described, consistent with the requirements of s.2.44(1) of *State Environmental Planning Policy (Transport and Infrastructure) 2021* (Transport and Infrastructure SEPP), in that, for land reserved under the NPW Act, this can only apply if:
 - a. *is authorised by or under that Act*. The EIS has not adequately considered the provisions of the NPW Act to justify that the project is or can be authorised under that Act, and/or
 - b. *is subject to an existing interest under s.39 of the NPW Act*, which may be in part be applicable to the existing Eraring – Kemps Creek 500 kV line on Jilliby SCA but does not apply to new connective or ancillary works, nor to the construction access proposed on the NPWS estate, and/or
 - c. *is carried out within an existing easement that has been granted and is not contrary to the terms of that easement*, which applies to the existing Eraring – Kemps Creek 500 kV line but does not apply to new connective, extension or ancillary works, nor to the construction access on the NPWS estate, and/or
 - d. *is an electricity work to which s.53 of the Electricity Supply Act 1995 applies*, which may apply but has not been adequately explained as part of the permissibility discussion in the EIS.
4. clarify how approving the project on lands reserved or acquired under the NPW Act would be consistent with s.2A(3) of the NPW Act. This section of the Act, which applies to any function under the NPW Act, requires the Minister for the Environment, the DCCEEW Secretary and NPWS to give effect to the following:
 - a. the public interest in the protection of the values for which land is reserved under this Act as Jilliby SCA and Watagans NP, and
 - b. *the appropriate management of those lands*, consistent with the management principles for each reservation type (refer to s.30E and s.30G of the Act) and the *Watagans National Park and Jilliby State Conservation Area Plan of Management* (NPWS-DECCW 2010), as the adopted statutory plan under the NPW Act, which prevails as per s.81(4) of the NPW Act.

5. clarify consistency with the Forestry Act as it relates to Corrabare North FR as state forest declared to be a flora reserve for the preservation of native flora, and with the approved *Corrabare Flora Reserves (Corrabare North (No.203 and Corrabare South No.204) Site Specific Working Plan (NPWS-FCNSW 2023)*
6. confirm how the project remains consistent with the terms of the existing Transgrid easement for the Eraring – Kemps Creek (5A1 and 5A2) 500 kV line or whether extension or variation is required, including potential application of s.153 of the NPW Act
7. clarify the authorisation pathway under s.151 of the NPW Act for areas under the Act to enable construction access, temporary occupation and asset installation on the NPWS estate
8. clarify the authorisation pathway under the Forestry Act for works in Corrabare North FR, including reliance on a lease under s.33 and related requirements
9. confirm how the final easement under s.34 of the Forestry Act will be established post-construction and the status of negotiation with Forestry Corporation of NSW
10. clarify implications of the acquisition of perpetual Crown Lease 1937/1 (Lot 165 DP755219) as offset land under the Huntlee Voluntary Planning Agreement (VPA) for MP10_0137 (Huntlee New Town Development).
11. confirm application of future acts provisions under the Commonwealth *Native Title Act 1993* as they relate to upgrade of NPWS assets and establishment of new project infrastructure.

EnergyCo appreciates the support of NPWS and the acknowledgement provided in the EIS submission of the significant efforts that were made to avoid impact to land reserved under the National Parks and Wildlife Act. This was a key design objective and a high priority of the Department broadly.

Response

1. Reference is made to items 16 to 18 of the SEARs advice provided for the project by NPWS during public exhibition of the Scoping Report of the HTP in June 2024 (DOC24/379096-12). These matters relate to impact to NPWS estate, authorisations pathways, NPWS operations, and land tenure clarification and are addressed in the responses below.
2. EnergyCo acknowledges that NPWS is the appointed land manager for Corrabare North Flora Reserve pursuant to *section 16* of the Forestry Act as distinct areas of state forest administered by the Forestry Corporation of NSW. *Section 5.6* of the Amendment Report has provided clarification and additional context concerning the administration of the Corrabare North Flora Reserve as distinct from other State forest reserves. EnergyCo, FCNSW and NPWS have worked together to amend the relevant working plans for Corrabare North Flora Reserve to ensure the project is provided for under these plans.
3. Permissibility is established under *section 2.15(c)* of the Planning Systems SEPP which provides for the declaration of CSSI. As the HTP is listed in *schedule 5, section 30* of the Planning Systems SEPP, the project is permissible without consent. EnergyCo acknowledges that there is still a process to follow to establish an easement.
4. Through engagement with NPWS during the route selection refinement process impact to NPWS estate has been limited mainly to access track upgrade work. This effort is acknowledged by NPWS, noting that the project's alignment avoids direct transmission line impacts on Watagans NP and Jilliby SCA. This avoidance of impact ensures that the objects of the NPW Act,

including conservation of biodiversity, conservation of heritage, public appreciation, and land management are not adversely impacted, particularly in Jilliby SCA and Watagans NP.

NPWS have been consulted and confirmed that *The Watagans National Park and Jilliby State Conservation Area Plan of Management* (NPWS 2010) does not prohibit development that is assessed and approved under the EP&A Act.

5. EnergyCo appreciates NPWS support and collaboration in amending The Corrabare Flora Reserves (Corrabare North (No.203 and Corrabare South No.204) Site Specific Working Plan (NPWS-FCNSW 2023) to ensure the project is consistent with the working plans in the Corrabare North Flora Reserve.

Following this collaboration, Section 2.3 of the Site Specific Working Plan (NPWS-FCNSW 2023) now provides for the HTP.

Issue-specific environmental management plans will be developed and implemented during construction of the HTP. These include (but are not limited to) biodiversity, biosecurity, heritage, traffic, social, and soil and water environmental management plans plus a bushfire emergency management and evacuation plan, provided in *Appendix D* of the Amendment Report. These plans will consider the Corrabare Flora Reserves (Corrabare North (No.203 and Corrabare South No.204) Site Specific Working Plan (NPWS-FCNSW 2023) as appropriate as well as any conditions applied by NPWS.

6. The project's alignment was refined to avoid direct transmission line impacts on Watagans National Park and Jilliby SCA. The construction of new transmission line infrastructure in the existing Transgrid line was redefined to minimise impacts on Jilliby SCA. The amended project impact area includes around 95 hectares of land managed by NPWS, including the Corrabare North Flora Reserve and the Jilliby SCA (including land within existing easements).

While construction would mostly take place within the existing Transgrid easement a temporary construction lease under section 151 of the NPW Act would be required for the enabling of construction access, temporary occupation, and asset installation outside the existing easement. A variation to the existing Transgrid easement sought under section 153 of the NPW may be required for the placement of permanent infrastructure associated with HTP in NPWS estate, this process has commenced and will be finalised post approval.

7. *Section 151* of the NPW Act raised by the NPWS provides that the Minister for the Environment and the Minister for Climate Change may grant a lease or licence of land within a reserve. A lease or licence granted under this section may authorise the erection of a new building or structure on the land concerned the modification of an existing building or structure on the land concerned. As a result of avoidance efforts in design, the components of the HTP within Jilliby State Conservation Area would mostly be limited to the existing Transgrid transmission easement.

Works occurring outside the existing Transgrid easement are anticipated to be minimal. The enabling of construction access, temporary occupation, and asset installation on the NPWS estate will be resolved through licence application under *section 151* of the NPW Act. The process has begun with NPWS to obtain a licence under 151 of the NPWS Act.

8. Section 33 of the Forestry Act provides that a lease to occupy land within a State Forest or flora reserve may not be granted except under the Forestry Act. Section 34(1) of the Forestry Act provides that the Minister (being the Minister of Climate Change, the Minister of the Environment, and the Minister for Agriculture) may, on such terms and conditions as the Minister thinks fit, grant an easement or right of way through or over land within a State forest or flora reserve. An establishment of an easement will be required for permanent infrastructure for the HTP proposed in Corrabare North Flora Reserve.

These would be obtained either by agreement (as per section 34(1) of the Forestry Act) or by compulsory acquisition in accordance with the requirements of the *Land Acquisition (Just Terms Compensation) Act 1991*. EnergyCo has been in ongoing negotiations with the FCNSW concerning the creation of an easement for the HTP.

9. EnergyCo has been in ongoing discussions with the FCNSW regarding the creation of an easement for the HTP.

The easement would be obtained either by agreement (as per section 34(1) of the Forestry Act) or by compulsory acquisition in accordance with the requirements of the *Land Acquisition (Just Terms Compensation) Act 1991*.

EnergyCo will keep NPWS updated as this matter progresses.

10. EnergyCo has consulted with NPWS and recognise that Lot 165 DP755219 is proposed to be incorporated into the Corrabare North Flora Reserve and was dedicated as such to offset the Huntlee New Town development.

Crumps Road, a substantial (approximately 10 metres) haulage road, traverses the northwest corner of the property lot for approximately 140 metres. It is unlikely this road would require upgrading, *Technical Report 1 – Biodiversity development assessment report* of the EIS has taken a conservative approach and assessed an impact width of 20 metres to this section of road, however, if this upgrade work occurs NPWS will be notified, and a proportionate offset response will be provided (refer to *Appendix E (Revised biodiversity development assessment report)* of the Amendment Report).

11. Future acts provision under the Commonwealth *Native Title Act 1993* relate principally to future acts that affect native title. As per section 24(AA) of *Native Title Act 1993* future acts provisions apply to the extent that a future act affects native title, and invalid if not. As defined in section 227 of the *Native Title Act 1993* an Act affects native title if it extinguishes the native title rights and interests, or if it is otherwise wholly or partly inconsistent with their continued existence, enjoyment, or exercise.

Section 24KA(1) of the *Native Title Act 1993* applies to future acts that permits or requires the construction, operation, use, maintenance or repair, by or on behalf of statutory authority of the Crown, of an electricity transmission or distribution facility that is to be operated, or is operated, for the general public. Furthermore, section 24KA(k) of the *Native Title Act 1993* applies if an electricity transmission or distribution facility does not prevent native title holders in relation to land or waters on which the thing is located or to be located from having reasonable access to such land or waters in the vicinity of the thing, except while the thing is being constructed or for reasons of health and safety. For the purposes of the HTP, the establishment of permanent

infrastructure would not limit future native title holders having reasonable access to such land or waters, except during construction or for reasons of health and safety.

However, as described in *section 12.2.3* of the EIS, a search of the National Native Title Tribunal identified no known native title claims under the Commonwealth *Native Title Act 1993* or any Indigenous Land Use Agreements relevant to the project impact area. Accordingly, future acts provisions under the Commonwealth *Native Title Act 1993* would not apply to upgrade of NPWS assets and establishment of new project infrastructure unless native title is established in the project impact area.

A search of the National Native Title Tribunal on 18 December 2025 as part of the Amendment Report identified no known native title claims under the Native Title Act 1993 (Commonwealth). Changes at Eraring substation as part of the amended project have resulted in an increased footprint that intersects with a registered Indigenous Land Use Agreement (NIA2000/001). Consultation would be carried out with the relevant parties to this agreement during detailed design. Refer to *section 5.6* of the Amendment Report for further details.

8.6.2 Project description as it affects the NPWS estate

Summary of issue

NPWS requests the following matters be addressed:

As part of the EIS addendum report:

12. Identify NPWS estate park roads and management trails, including gazetted roads and Ministerial Roads using available spatial datasets
13. Confirm access requirements through Watagans NP via Watagans Forest Road as secondary construction and emergency egress, including likely upgrades, road condition monitoring and remediation commitments.
14. Clarify whether upgrades or widening are required to support access via Harris Trail and Bowmans Road, and how this interacts with the existing NPWS–Forestry Corporation memorandum of understanding (MOU).
15. Confirm the application of a buffer to the NPWS estate during micro-siting to prevent encroachment and apply ‘no clearing zones’ outside the agreed impact area on Watagans NP and Jilliby SCA
16. Commit to reducing native vegetation clearing in Corrabare North FR in recognition of its flora values
17. Confirm the extent of access, ancillary upgrades and adjustment works required on the NPWS estate as a worst-case scenario, including works associated with the existing 500 kV line
18. Ensure the EIS sets out use, upgrades and associated impacts for NPWS park roads, management trails and Ministerial roads
19. Confirm construction and upgrade standards for NPWS roads, management trails and Ministerial roads, including:
 - a. Compliance with Central Coast or Lower Hunter Fire Access and Fire Trail Plan and *NSW Fire Trail Standards* (RFS, 2023) on designated fire trails

- b. Provision of engineered design plans for unsealed roads in consultation with NPWS
20. Confirm whether the new line connection and adjustments to the existing 500 kV line require temporary or permanent easement widening on Jilliby SCA, to determine the correct NPW Act authorisation pathway
21. Clarify the scope of ancillary works associated with earth wire and communications system installation on the existing 500 kV line where it affects the NPWS estate

Response

12/13/14/18/19. A work program has been undertaken using spatial datasets to identify all roads that the project would use, and to ensure they are correctly described and the authorisation required for upgrades is understood.

Watagans Forest Road is identified as a suitable emergency egress route/secondary access route in its existing condition. Emergency management plans will be prepared and if deficiencies are identified NPWS will be consulted and the correct upgrade authorisations will be obtained.

A small eastern section of Harris Trail is required to be widened. The broader Harris Trail and Bowmans is not proposed to be upgraded. EnergyCo has not reviewed the FCNSW/Forestry MOU relating to joint maintenance of roads. Any potential changes to this agreement will be addressed through the FCNSW land access process and/or the NPWS licence authorisation process, both post determination.

Road upgrade works will consider the relevant standards including Fire Trail Standards. NPWS will be provided design documentation for the relevant road upgrades on park estate.

15/16/17/20/21. Significant effort was made to avoid and minimise potential impacts on conservation areas and nature reserves managed by the NPWS.

There would be no impact on Watagans National Park. However, there would be unavoidable impacts on Corrabare North Flora Reserve and minor impacts (access upgrades) to Jilliby SCA.

Approximately 1.8 kilometres of the transmission line would traverse the Corrabare North Flora Reserve. Significant efforts have been made to minimise vegetation clearing and potential impacts on habitat in Corrabare North Flora Reserve by designing the transmission line to maintain no clearing zones within gullies (see *Figure 8-2* and *Figure 8-3* in *section 8.1.5, Chapter 8 (Biodiversity)* of the EIS).

The transmission line was refined to avoid Jilliby SCA. Potential impacts to the Jilliby SCA would be limited to:

- ancillary works associated with road upgrades along sections of Martinsville Hill Road and Watagan Road
- adjustments/upgrades to the existing Eraring to Kemps Creek 500 kV line (Line 5A1 and 5A2) involving access track upgrade works where required, tower strengthening and structural integrity testing, stringing new earth wire and communications systems on existing towers. No easement widening of the existing easement is proposed.

The project would clear around 18.61 hectares in Corrabare North Flora Reserve and around 11.10 hectares of native vegetation in Jilliby State Conservation Area.

Impacts to biodiversity (including land managed by the NPWS) will be minimised through the application of mitigation and management measures and the implementation of a biodiversity management plan (BMP) (refer to *Appendix D (Updated mitigation measures)* and *Appendix E (Revised biodiversity development assessment report)* of the Amendment Report. The BMP will include (but not be limited to):

- the location and extent of areas of vegetation clearance and habitat disturbance, and how these will be suitably demarcated on-site
- the location and extent of areas to be protected (e.g. retained vegetation, hollow-bearing trees, nests, burrows and other habitat features, including applicable buffers to habitat features) located inside the construction impact area or in close proximity to clearing areas
- measures to be implemented on-site to clearly demarcate areas to be retained as 'no go areas'.

The BMP will be prepared by biodiversity experts in consultation with relevant government agencies including NPWS, CPHR, FCNSW, and the Australian Government Department of Climate Change, Energy, the Environment and Water (DCCEEW), refer to *Appendix E (Revised biodiversity development assessment report)* of the Amendment Report.

The preferred alignment will continue to be refined during detailed design. This will include mechanisms to adjust project features to avoid areas with high biodiversity value when on-the-ground works commence, including the minor relocation of project elements such as transmission towers to avoid high biodiversity values (termed micro-siting) (refer to *Appendix D (Updated mitigation measures)* and *Appendix E (Revised biodiversity development assessment report)* of the Amendment Report).

8.6.3 Aviation-based operations on, and proximate to, the NPWS estate

Summary of issue

NPWS requests the following matters be addressed:

22. Recognise NPWS helicopter landing sites (HLS) on the NPWS estate located within 10 km of the project impact area, including at the Sawmill site off Martinsville Road and McCanns Ridge along Watagans Forest Road on Watagans NP
23. Consider project-related impacts associated with the location and use of these HLS on the NPWS estate.
24. Recognise that NPWS can construct and utilise helipads on the NPWS estate during emergency or incident response.

As part of the AIA addendum report to:

25. Confirm aviation requirements and standards relevant to NPWS operations, noting the use of both helicopters and fixed-wing aircraft.
26. Clarify and assess implications for HLS at the Sawmill site and McCanns Ridge.
27. Recognise NPWS as an agency that operates its own aircraft and as a relevant stakeholder in aviation planning within eight kilometres of the estate boundary, given statutory obligations to respond to external threats.

28. Confirm that NPWS undertakes complex aerial activities including firefighting, baiting, spraying, vertebrate pest and fauna surveys, emergency response, and infrastructure servicing, some of which occur in low light, low visibility, and at lower levels than described in the AIA.
29. Recognise risk to NPWS HLS operations and aircraft use during construction and operation, and identify long-term strategies to maintain safe aircraft operations, including:
- a. installation of line-marker balls in accordance with AS3891 as a visual warning
 - b. obstacle lighting on towers for low-visibility conditions, to be normally off and activated during emergency operations.

As part of future operational plans and conditions, NPWS also requests:

30. Consideration of drone and aircraft use over the NPWS estate, consistent with NPWS drone and filming policies
31. Identification of NPWS as a key agency in preparation of construction environmental management plans, emergency planning, and aerial operations planning
32. Recognition of risk to HLS and aerial operations on the estate during construction, including requirements to:
- a. Confirm NPWS is a bushfire firefighting authority operating its own aircraft for this purpose, and as part of general park management operations. Noting that aerial operations will, and do occur in low light and visibility conditions at low levels
 - b. Provide NPWS with the final transmission line design and tower placement data as a georeferenced spatial file, with recorded coordinates of all transmission tower locations, crane operational areas and line alignment with allocated restricted (flight) areas. Before construction commences
 - c. Ensure notification to NPWS of any tower location siting modification, occurring during construction with updated data provision
 - d. Notify NPWS before tower construction commences, and construction location updates where use of the cranes occurs for tower installation, or any at-height construction assets, including any safety cabling, framework or meteorological masts.
 - e. Notify NPWS project flight plans, to ensure helicopter and drone operations (including wire installation) are communicated and coordinated during construction where the operations are on the NPWS estate and/or within 8km of the NPWS estate boundary
 - f. Direct notifications to the NPWS Aviation Duty Officer and relevant NPWS area managers for g. Wollemi–Yengo, Corrabare North FR, Lot 165 DP755219, h. Jilliby SCA and Watagans NP.

Response

22/23/26/32. EnergyCo acknowledges that NPWS conducts aviation operations within and adjacent to the NPWS estate. Under Civil Aviation Safety Authority (CASA) regulations, the NPWS helicopter landing sites (HLS) at McCanns Ridge and the Sawmill site, are treated as uncertified aerodromes, and that as a result operational safety, feasibility and constraints are determined by the pilot in command on the day of operations. This is consistent with *Technical Report 16 - Aviation impact assessment* which notes that uncertified helipads fall under existing CASA minimum height, obstacle-avoidance and operational-planning requirements.

The McCanns Ridge HLS is approximately 7.4 kilometres away from the HTP alignment, and no operational impacts are anticipated to be associated with the construction or operation of the HTP. The Sawmill HLS is approximately 0.5 kilometres from the HTP, and a desktop assessment shows

the HLS would only be constrained to the west of the Sawmill HLS, allowing for operations from all other directions. The impacts to the Sawmill HLS are anticipated to be low, however aviation impacts are based on assumptions, noting that NPWS has not currently provided operational environmental data (run-in/run-out paths, approach constraints, or usage patterns) for detailed assessment.

24. Emergency helipad establishment by NPWS anywhere on estate lands is already permissible under CASA rules. EnergyCo acknowledges that obstacles (including transmission towers) become part of the aviation environment once built and are published through Airservices Australia under Civil Aviation Safety Regulations (CASR) Part 175 (obstacle reporting requirements).

25. Aviation requirements applicable to NPWS operations, include relevant CASR and CASA rules and regulations as detailed in *Technical Report 16 – Aviation impact assessment*. Further, EnergyCo recognises that some NPWS activities occur in low-visibility or low-light conditions, however notes that these operations remain governed by Visual Flight Rules (VFR), Instrument Flight Rules (IFR) procedures, and pilot-in-command judgement. Any additional NPWS-specific standards beyond CASA regulation would need to be discussed between NPWS and CASA.

27/28/29/30/31. EnergyCo acknowledges NPWS' request for long-term strategies to maintain safe aircraft operations including:

- installation of line-marker balls in accordance with AS3891 as a visual warning
- obstacle lighting on towers for low-visibility conditions, to be normally off and activated during emergency operations.

Mitigation measure AS5 highlights that line-maker balls and obstacle lighting is not required outside of the lateral limits of certified airports' OLS, however, should be discussed with uncertified aerodromes within three nautical miles of the project during detailed design. Refer to *Appendix D (Updated mitigation measures)* of the Amendment Report for further details.

EnergyCo acknowledges that NPWS manages aircraft and drone operations (including firefighting) in accordance with its internal aviation, drone and filming policies. Construction related drone and helicopter activities will be address through the construction environmental management plan (CEMP) or an appropriate sub-plan. EnergyCo will ensure that construction-related aviation activities (such as line-stringing flights, inspections or drone surveys) are planned and undertaken in accordance with CASA requirements and notified to relevant land managers, including NPWS where flight paths intersect NPWS-managed land. During the development of the CEMP, relevant agencies, organisations and stakeholders will be consulted as required by the Department of Planning, Housing and Infrastructure (DPHI).

EnergyCo will provide NPWS with the final transmission line design and tower coordinates as a georeferenced spatial file during construction and operation of the HTP, which will include tower locations and heights. Relevant stakeholders will also be notified of construction activities, any crane operations and stringing operations as required throughout the duration of the project, with any changes to the tower locations and heights communicated as required. Notifications will be provided to the NPWS Aviation Duty Officer and relevant NPWS Area Managers for Wollemi–Yengo, Corrabare North Flora Reserve, Lot 165 DP755219, Jilliby SCA and Watagans National Park, consistent with NPWS request.

32. EnergyCo acknowledges that NPWS is a bushfire firefighting authority that undertakes aviation operations on and adjacent to the NPWS estate as part of emergency response and broader park management activities, including operations that may occur at low altitudes and in low-light or reduced-visibility conditions in accordance with applicable CASA requirements.

To support aviation safety and operational awareness during construction, EnergyCo will provide NPWS with the final transmission line design and tower placement information as a georeferenced spatial dataset. This dataset will include the coordinates and heights of all transmission towers and the confirmed line alignment. Where tower locations or heights are modified during construction, updated spatial information will be provided to NPWS.

NPWS will be notified prior to the commencement of tower construction activities, including where cranes or other at-height construction assets are proposed. Where construction sequencing changes result in updated crane locations or operating periods, NPWS will be advised accordingly.

Construction-related aviation activities associated with the project, including helicopter and drone operations (such as line stringing, inspections and surveys), will be planned and undertaken in accordance with CASA requirements. Where these activities occur on NPWS-managed land and/or within approximately eight kilometres of the NPWS estate boundary, EnergyCo will notify NPWS to support operational coordination during construction.

These notification and coordination requirements will be detailed within the construction environmental management plan (CEMP) or relevant sub-plans prepared prior to construction.

8.6.4 Bushfire management on the NPWS estate

Summary of issue

NPWS recommends as part of the EIS addendum report:

33. Confirm and set out the application of the NSW *Rural Fires Act 1997* with respect to bushfire management on the NPWS estate as public land.

As part of the BFRA addendum report:

34. Consider the project in the context of the Central Coast and Lower Hunter Bush Fire Risk Management Plans and supplementary Fire Access and Fire Trail Plans

35. Complete an assessment of the strategic fire trail network, including implications for wildfire response and hazard reduction works on the NPWS estate

36. Consider bushfire management implications and protection of sensitive areas associated with published NPWS reserve fire management strategies, including:

a. Jilliby State Conservation Area Fire Management Strategy (DEC, 2006)

b. Watagans National Park Reserve Fire Management Strategy (DEC, 2006)

37. Recognise the NPWS strategic fire trail network, noting fire trail designation and category in the relevant FAFT Plans

38. Confirm designated fire trails adopted under s.59A of the NSW *Rural Fires Act 1997*, and ensure all upgrades comply with, or exceed (with approval), the NSW Fire Trail Standards and associated design, construction and maintenance manuals

39. Confirm that access across the NPWS estate will be retained to ensure the agency can adequately respond to bushfire emergencies, noting that blocking or closing strategic fire trails is an offence under Division 7, Part 3B of the Rural Fires Act, and ensure arrangements are in place prior to construction.

As part of future emergency or bushfire management plans and conditions:

40. Identify NPWS as a key agency in the preparation of construction environmental management plans and relevant emergency planning for the project.

Response

33/34. The application of the *Rural Fires Act 1997* to the project and the relevant public land managers is described in *section 3.1 of Technical Report 14 – Bushfire risk assessment*. This section outlines the statutory bushfire management framework in NSW, including the roles of Bush Fire Management Committees and the preparation and implementation of bush fire risk management plans (BFRMPs) under the Act.

The HTP traverses three BFRMP areas: the Hunter Valley, Lower Hunter and Central Coast (see *section 3.1 of Technical Report 14 – Bushfire risk assessment*). These plans identify bushfire risks and assign responsibilities for prevention, mitigation and response across public and private land.

As confirmed in *section 4.2 of Technical Report 14 – Bushfire risk assessment*, sections of the project located on or adjacent to land managed by multiple public authorities. Areas within State forests fall under the fire management responsibility of the FCNSW, which is recognised as the appropriate fire authority for Pokolbin, Corrabare, Watagan and Olney State Forests under the *Rural Fires Act 1997*.

Sections of the project also occur in proximity to the NPWS managed land, including Jilliby State Conservation area and Corrabare North Flora Reserve. Fire management within these reserves remains the responsibility of NPWS. The project does not alter statutory fire management responsibilities for NPWS managed land.

The project has been considered in the context of the Central Coast and Lower Hunter BFRMPs, noting that these statutory plans guide bushfire management priorities across the regional landscape. The NPWS submission raises matters relating to fire access, fire trail networks and fire management considerations within nearby reserves.

A recommended requirement of the *Technical Report 14 – Bushfire Risk Assessment* is the preparation of a Bush Fire Emergency Management and Evacuation Plan (BFEM&EP). This plan will be prepared prior to construction in consultation with the relevant public authorities.

35-38. NPWS requested a level of strategic fire trail analysis that is beyond the requirements of the SEARs issued for the project. The SEARs require the bushfire assessment to:• *assess risks to public safety, with particular attention to bushfire risks, emergency egress and evacuation*; and• *describe bushfire protection measures for the project, including the approach to vegetation management within the transmission easement, having regard to Planning for Bush Fire Protection 2019 (PBP)*.

The first of these requirements concerns access and egress in the context of public safety. It does not require a full strategic review of regional NPWS fire trail networks, or an assessment of potential implications for NPWS's broader fire management activities, wildfire response or prescribed burning programs on nearby reserves.

The HTP would have negligible impact on NPWS's ability to access its estate or undertake wildfire response and hazard reduction activities. Improvements to major forest roads may in fact enhance access and reduce response times for fire authorities. The project would not materially affect NPWS's capacity to undertake fire management on its estate, nor would it affect the strategic fire trail functions identified in NPWS Fire Management Strategies or FAFT Plans.

Given this context, confirmation of fire trail designations under section 59A of the *Rural Fires Act 1997* or assessment against the NSW Fire Trail Standards is not required, as the project does not intersect designated NPWS fire trails and does not involve upgrades to trails subject to those standards.

39. Section 5.3 of the *Technical Report 14 – Bushfire risk assessment* outlines that HTP corridor has by design, as far as practicable, avoided colocation of the corridor with major strategic access/egress roads including:

- Watagan Forest Road and Wollombi Forest Road in Olney State Forest
- North Road / Trig Road / Cabans Road in Corrabare State Forest
- Broken Back Road in Pokolbin State Forest.

The HTP corridor maintains the ability of firefighters to utilise these strategic trails for fire management operations.

The project would provide additional access tracks (for accessing transmission towers and easements) and some upgrading of existing roads to provide improved access for construction and operation. These works would improve access/egress in the area surrounding the project.

40. EnergyCo acknowledges NPWS's role as the land manager for the NPWS estate. While consultation requirements for construction environmental management plans will ultimately be defined through the Minister's Conditions of Approval, EnergyCo recognises the importance of maintaining effective coordination with NPWS on matters relating to fire trail access, emergency response and bushfire risk management where the project interacts with the NPWS estate. EnergyCo will continue to engage with NPWS as appropriate to ensure construction activities do not impede NPWS's statutory bushfire management responsibilities.

8.6.5 Emergency access across the NPWS estate

Summary of issue

NPWS recommends as part of the EIS addendum report:

41. Confirm that the emergency evacuation routes are fit for purpose, requiring no further environmental assessment under the EIS. If upgrades or maintenance works are required, consider as part of the EIS. As this route affects the Watagans NP, confirmation is required as part of the project's authorisation.

42. Clarify the park roads, and/or ministerial roads, that are included in the emergency evacuation route identification. Is this just Watagan Forest Road on Watagans NP, or the ministerial roads known as Harris Trail and Bowmans Road?
43. Confirm procedures for the creation of emergency helipads should these be required within the NPWS estate.

Response

41/42. The SEARs issued for the HTP do not require the EIS to undertake a strategic fire-trail network assessment or provide a review of regional fire management capabilities. This level of strategic land-management planning falls outside the scope of the project and its associated assessment.

Section A.3.11 of *Appendix A (Updated project description)* of the Amendment Report identifies proposed emergency evacuation routes for HTP Central and South. These routes are intended for use by construction workers in the event of an emergency and will be identified and finalised through the development of the bush fire emergency management and evacuation plan (BFEM&EP). The proposed routes include:

- Broken Back Trail, Sawpit Road, Cedar Creek Road
- Oakey Creek Road, Mount View Road
- Harris Trail, Bowmans Road, Watagan Forest Road, Heaton Road, Mount Faulk Road
- Watagan Creek Road
- Walkers Ridge Road
- Watagan Forest Road, Heaton Road, Mount Faulk Road.

Helipads at Flick Road and Wollombi Foret Road laydown areas were also identified as part of emergency scenario planning and are capable of being used if required. These routes and laydown areas remain fit for purpose and meet the requirements of the SEARs by demonstrating that safe egress is available to construction personnel under bushfire scenarios.

Any necessary refinement of evacuation routes, including temporary traffic arrangements during construction, will be addressed in the BFEM&EP as required by *Technical Report 14 – Bushfire Risk Assessment*. The BFEM&EP will be developed during detailed design, when final road alignments, upgrades and construction support sites are confirmed and will be developed in consultation with relevant stakeholders as required.

EnergyCo acknowledges that emergency helipads on NPWS-managed land may be established by NPWS under its existing authority and operational procedures. NPWS helicopter landing sites (HLS) are treated as uncertified aerodromes under CASA regulations, and their operational adequacy is determined by the pilot in command on the day. These arrangements fall within NPWS' standard emergency response functions and do not require separate approval under the HTP EIS.

The HTP does not prevent NPWS from establishing temporary emergency helipads within the estate as required for firefighting, search and rescue, or incident response. The location and operational parameters of any emergency helipad will be determined by NPWS in accordance with CASA low-level flight requirements and NPWS internal emergency procedures. The HTP will ensure that NPWS are provided with obstacle and construction-phase information (including tower locations and

any temporary at-height construction activities) so that NPWS can safely plan and conduct aviation operations.

8.6.6 Conservation of Aboriginal cultural heritage values on the NPWS estate

Summary of issue

NPWS recommends as part of the EIS addendum report:

44. Confirm that NSW DCCEEW Heritage is the responsible authority for Aboriginal cultural heritage and the application of Part 6 of the NPW Act.

As part of *Technical Report 2 – Aboriginal cultural heritage assessment* of the EIS addendum report to:

45. Include, within the 'ACHA Summary', recognition of impacts to the NPWS estate consistent with the SEARs, and acknowledge that the project will directly affect land administered under the National Parks and Wildlife Act
46. Confirm NPWS's role is in the protection and conservation of cultural values with respect to land administered under the NPW Act
47. Consider the statutory obligations under the NPW Act, with a review of Sec.A.2.2 in Appendix A of *Technical Report 2 – Aboriginal cultural heritage assessment* of the EIS, addressing the provisions of the NPW Act and NPW Regulation with respect to protection of cultural values on the NPWS estate
48. Ensure consideration of avoidance and in-situ management of rock shelters on the NPWS estate, including micro-siting of towers on Corrabare North FR to avoid impacts to cultural values. Where avoidance is not possible, controlled movement of objects should be used to preserve values. NPWS recommends applying a conservation hierarchy with the RAPs, prioritising in-situ conservation of burials, rock shelters, scar trees, grinding grooves, and extensive artefact scatters, followed by controlled movement of artefact scatters or isolated finds to ensure preservation.
49. Reconsider and confirm of how isolated finds and low-density artefact scatters on the NPWS estate will be managed, noting that *Technical Report 2 – Aboriginal cultural heritage assessment* of the EIS currently affords no management for these materials. NPWS will only accept this approach if justified in *Technical Report 2 – Aboriginal cultural heritage assessment* of the EIS and undertaken under the direction of RAPs, consistent with the intent of the NPW Act to conserve Aboriginal objects on land administered under that Act. NPWS emphasises a preference for in-situ protection and the consistent application of this principle across Corrabare North Flora Reserve and all managed lands. Given the potential for unexpected finds during construction, all management decisions for Aboriginal objects on the NPWS estate must involve, and be determined by, the RAPs.
50. Reconsider and confirm of how 'background scatter sites' (HTP-S-BS1) on the NPWS estate will be managed. These comprise broader scatters of isolated Aboriginal objects and low-density artefact scatters (<20/m²) identified across the project impact area (HTP-N-BS1, HTP-C-BS1, HTP-S-BS1). While *Technical Report 2 – Aboriginal cultural heritage assessment* of the EIS recommends no management on the basis of limited scientific value, NPWS notes that scientific value differs from cultural significance, and such objects may hold deep meaning for the

Aboriginal community. Accordingly, NPWS considers that decisions regarding cultural significance and treatment of Aboriginal objects recovered on the NPWS estate must be made by the RAPs.

51. Consider management options for Aboriginal objects recovered or displaced during construction on the NPWS estate, with one of four scenarios:
 - a. Retention of Aboriginal objects and sites, with protection in situ
 - b. Moving Aboriginal objects outside of the project's impact area into selected restricted areas, before works commence
 - c. Relocation or repatriation to an identified safekeeping place as determined by the RAPs
 - d. Aboriginal objects can be held under safekeeping by an Aboriginal person or organisation subject to a care agreement.
52. Ensure that any salvage operations identified in *Technical Report 2 – Aboriginal cultural heritage assessment* of the EIS relating to the NPWS estate result in either Aboriginal objects being retained and assessed on the estate or subject to a care agreement
53. Ensure any removal or relocation of any culturally modified trees on NPWS estate, either in its entirety and/or via the removal of the 'scar' portion of the tree, is undertaken by a Level 5 qualified arboriculturist only once a conservation plan has been prepared by a heritage consultant with input from the Aboriginal community and with approval from the relevant NPWS Director
54. Revise Sec A.1.3 Native Title Act 1993 Appendix A (Legislation), which references the application of future Acts around the rights and interests over lands and waters by Aboriginal people, but does not address the actual project implications of the future acts regime.

As part of the future preparation of the ACHMP:

55. Identify NPWS as a key agency in the preparation and implementation of actions under the ACHMP where those actions affect the NPWS estate
56. Ensure that *Technical Report 2 – Aboriginal cultural heritage assessment* of the EIS and future ACHMP are uploaded to the NSW AHIMS, where new sites are created, or records modified on the NPWS estate
57. Ensure any future ACHMP addresses:
 - a. Matters raised about representatives for the Darkinjung people, around the management of the risk of ancestral burial site/s occurrence on Jilliby SCA. Identifying areas of likely harm, risk management, and migration measures are in place
 - b. Priority criteria for micro-siting of the project tower and ancillary construction requirements on the NPWS estate to ensure in-situ protection and conservation as a priority
 - c. Movement or repatriation of displaced or excavated archaeological material on the NPWS estate is to comply with NPWS guidelines and procedures
 - d. Ensure all Aboriginal objects retained in situ, moved, or relocated are recorded on AHIMS through an AHIMS site card update or site card impact form as soon as possible
 - e. Ensure the provision of a translocation plan to support the relocation of key species attached to the actions associated with Aboriginal resource and gathering values, accord with the NSW Translocation policy and procedure.

Response

44/46 NSW DCCEEW (Heritage NSW) is the responsible authority for the application of Part 6 of the NPW Act. NPWS maintains its conservation responsibilities for land administered under the NPW Act. This is addressed through the inclusion of a requirement for consultation with NPWS to develop several of the post-approval documents proposed in *Chapter 9 (Management)* and further elaborated in *Appendix D (Post approval requirements – updated guiding principles)* of *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report.

45. It is acknowledged in section 3.4 of *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report that portions of Corrabare North Flora Reserve and Jilliby SCA which are managed and operated by NSW National Parks and Wildlife Service are included in *Technical Report 2 – Aboriginal cultural heritage assessment* of the EIS study area.

47. Updated management and mitigation measures are included in *Chapter 9 (Management)* and *Appendix D (Post approval requirements – updated guiding principles)* of *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report, which further consider management of cultural values under the NPW Act.

48/52. *Technical Report 2 – Aboriginal cultural heritage assessment* of the EIS includes recommendations for the avoidance of significant Aboriginal sites (including rockshelters) in mitigation measure AH03 and ongoing efforts to avoid or minimise impacts to all cultural materials through activities such as micro-siting in mitigation measure AH04. These conditions remain in *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report (now labelled AH02 and AH03), but in addition further consideration of avoidance is now proposed in mitigation measure AH01 when detailed design becomes available.

The management of cultural materials would be determined as part of the proposed ACHMP (mitigation measure AH04), however additional statements are included in section 9.5 and *Appendix D (Post approval requirements – updated guiding principles)* of *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report to ensure NPWS are consulted in the development of the ACHMP and that those cultural materials found within NPWS estate prioritise their retention and/or return to the estate where agreed by the RAPs.

49/50. Similar comments are made in the NSW DCCEEW (Heritage NSW) submission (refer to section 8.1 of this Submissions Report). Specifically, *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report includes all Aboriginal objects, sites and places within the amended project impact area, including isolated finds and low-density artefact scatters, and explores their significance and potential impact. Updated mitigation measures are included in *Chapter 9 (Management)* and *Appendix D (Post approval requirements – updated guiding principles)* of *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report, which now propose management of all cultural materials, and the proposed ACHMP would be developed with, and include the ongoing involvement, of RAPs. One component of the ACHMP includes the need to develop suitable unexpected finds protocols. Appendix D.4 of *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report also includes existing management requirements and approvals to further align management of the cultural materials with existing processes.

51/57. The management of any cultural materials requiring recovery or mitigation during the project would be undertaken in accordance with the directions of the ACHMP (mitigation measure AH04). The ACHMP is yet to be developed, but would typically include approaches that first seek to avoid/minimise impact, followed by methods for relocation, retention and long-term management of cultural materials. As such, it is considered that the proposed overarching approach requested by NPWS would align with the ACHMP when developed.

53. As noted for items 48 and 52, the management of cultural materials would be determined as part of the proposed ACHMP (mitigation measure AH04). It is considered a separate conservation plan is not needed for the removal or relocation of culturally modified trees, since the methods and long-term management of any culturally modified tree removal would be outlined in the ACHMP.

54. Native title implications for the project are included in *Chapter 12 (Land use and property)* of the EIS. *Technical Report 2 – Aboriginal cultural heritage assessment* of the EIS outlines broad Native Title Act processes and procedures, but does not focus on project-specific native title issues (if present).

55. Updated management and mitigation measures are included in *Chapter 9 (Management)* and *Appendix D (Post approval requirements – updated guiding principles)* of *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report, which now include the need to consult with NPWS during the development of the ACHMP.

56. NPWS's request to ensure that the AHIMS database is updated where new sites are created and for records to be modified for sites on NPWS estate where necessary is noted. The ACHMP will include reporting requirements for activities undertaken through its authorisation, and it is expected that these documents would be submitted to DPHI and Heritage NSW. All identified cultural materials are documented on the AHIMS database, and would similarly require updating as part of any activities implemented through the construction and operation of the project.

8.6.7 Historical and shared heritage values on the NPWS estate

Summary of issue

NPWS recommends as part of the EIS addendum report:

58. Recognise formal protection of cultural values under the NPW Act and NPW Regulation for items on the NPWS estate
59. Recognise NPWS heritage assets listed on the Historic Heritage Information Management System (HHIMS) as s.170 Heritage Conservation Register items, including:
 - a. Wishing Well (Osf 26), HHIMS Item ID 630, which will be impacted by the project
 - b. Original Forest House (Osf 15), HHIMS Item ID 653
60. Recognise the sawmill site at the corner of Martinsville Hill Road and other heritage values associated with Watagans NP and Jilliby SCA depicted in the adopted Plan of Management (DECCW, 2010) and applied under the NPW Act
61. Confirm outcomes for the Wishing Well, the associated spring, archival processes, and mitigation measures to ensure significance is not entirely lost

As part of Technical Report 7 – Historic heritage impact statement of the EIS addendum report:

62. Consider statutory obligations for heritage protection under the NPW Act
63. Include a formal heritage assessment of the Wishing Well
64. Confirm protection and mitigation measures for heritage items in proximity to construction to avoid loss of significance, including the Original Forest House and sawmill site
65. Confirm loss and management of HHIMS Item ID 630 (Wishing Well) and detected impacts to the sawmill site, committing to:
- retention and protection of the spring as a functional water supply, including future access arrangements, and addressing the effects of proposed widening and upgrades to Martinsville Road
 - protocols for management of artefacts or relics (heritage) associated with the sites in accordance with Heritage NSW guidelines
 - archival recording of cultural values in landscape, historic and shared heritage context, as supported by a formal assessment (see Item 62)
 - discussion of community feedback regarding the loss of the Wishing Well
 - relocation and reconstruction of the Wishing Well structure to the preferred heritage precinct site attached to the sawmill on Jilliby SCA, with implementation of an interpretive package informed by the Heritage Assessment. The relocation will need to accord with heritage conservation best practice and ensure the receiving site is adequately assessed in accordance with NPWS environmental impacts and risk assessment procedures
 - processes under the Heritage Act to remove the s.170 register listing and commence removal procedures
 - management of unexpected finds as historical archaeological relics, requiring cessation of works in affected areas and notification to Heritage NSW and the Heritage Council of NSW.

Response

58/59/60. *Appendix J (Historic heritage impact statement addendum)* of the Amendment Report acknowledges the NPW Act and NPW Regulation as the formal protective legislation for items on the NPWS estate in section 3.2. It is clarified that the HHIMS is NPWS' Section 170 Heritage and Conservation Register, and that Original forest house site (HHIMS site, Osf 15) and Sawmill site at the corner of Martinsville Hill Road and Watagan Forest Road fall under the Watagans National Park and Jilliby SCA Plan of Management.

61/62/63/65. A formal heritage assessment under the NSW heritage criteria has been undertaken for the Wishing Well with the information that could be gathered as part of research and which was provided by NPWS and FCNSW.

Consultation took place with the community, NPWS and FCNSW regarding the Wishing Well. A summary of community feedback on the Wishing Well has been included in the *Appendix J (Historic heritage impact statement addendum)* of the Amendment Report.

During a Wishing Well workshop, NPWS staff confirmed their preference for relocating the Wishing Well fabric to the location of the Sawmill site (located on the corner of Martinsville Hill and Watagan Forest Roads) to ensure its ongoing protection. This preference has been adopted in the mitigation measures. The Wishing Well fabric will be relocated to the Sawmill site, in accordance with relevant regulatory requirements, unless otherwise agreed with NPWS, FCNSW and Heritage NSW (as provided for in mitigation measure HH8). A commemorative plaque will be installed in a location as

close as possible/practicable to the water source of the Wishing Well, which is to be determined through further consultation with NPWS, FCNSW and Heritage NSW.

The water flow of the underlying spring was discussed and was noted to have Aboriginal cultural heritage value. Discussions with key stakeholders remain ongoing, with general agreement on the overall management of this site, which involves relocation of the tangible materials of the well, interpretation at the location of the site, and management of the spring where feasible. In *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report, direction has been included in *Appendix E – Post approval requirements – updated guiding principles* in relation to developing agreed mitigation measures of the site in close consultation with Traditional Owners and other key stakeholders. The agreed approach and method would be integrated into the ACHMP as outlined in mitigation measure AH04.

Any disturbance or destruction of unexpected items of potential heritage significance, relics or human remains will be managed in accordance with mitigation measure HH6. Refer to *Appendix D (Updated Mitigation Measures)* of the Amendment Report.

64. *Appendix J (Historic heritage impact statement addendum)* of the Amendment Report determined there would be no direct or indirect permanent and temporary impacts to Original forest house site (HHIMS site, Osf 15) and Sawmill site at the corner of Martinsville Hill Road and Watagan Forest Road, which is consistent with the findings of the EIS. As such, no mitigation measures would be required.

8.6.8 Management and mitigation

Summary of issue

NPWS requests the following matters be addressed as part of the future historic heritage management plan (HHMP), condition:

- 66. Ensure NPWS is identified as a key agency in the preparation of the HHMP, where it addresses heritage impact management and mitigation measures for values occurring on the NPWS estate
- 67. Preparation of the HHMP is to consider and adhere to NPWS guidelines in the management of heritage values on the NPWS estate.

Response

66. Consultation of the HHMP will be undertaken with NPWS on matters relating to heritage impact management for values occurring in the NPWS estate.

67. The HHMP will include consideration of and adherence to guidelines in the management of heritage values on the NPWS estate. Refer to *Appendix D (Updated mitigation measures)* of the Amendment Report for further details.

8.6.9 Recognition of biodiversity loss on the NPWS estate

Summary of issue

NPWS recommends as part of the EIS addendum report:

- 68. Recognise Jilliby State Conservation Area as an environmentally sensitive area of state significance as defined in s.2.2 of the *State Environmental Planning Policy (Planning Systems) 2021*
- 69. Recognise the NPW Act as NSW legislation that protects and conserves natural values (landscapes and biodiversity) on land administered under that Act

Response

68. EnergyCo recognises that Jilliby SCA is defined as an environmentally sensitive area of State significance in accordance with Section 2.2 of the *State Environmental Planning Policy (Planning Systems) 2021* as it is land reserved as a SCA under the *National Parks and Wildlife Act 1974*.

As described in Section 3.6.2 of the EIS, the HTP alignment was selected to avoid impacts to national parks and other protected land to the maximum extent possible, including Jilliby SCA, which was considered an environmentally sensitive area during the corridor refinement process.

69. Table 5.1 of the EIS recognised the NPW Act and its role in protecting and conserving elements of the natural environment. Around 30 hectares of the project impact area is reserved under the NPW Act, including the Jilliby SCA and the Corrabare North Flora Reserve. EnergyCo has begun discussions with the NPWS concerning the creation of an easement for the HTP within Jilliby SCA and the Corrabare North Flora Reserve.

Summary of issue

NPWS recommends as part of the *Technical Report 1 – Biodiversity development assessment report* of the EIS addendum report to:

- 70. Accord with the SEARs as issued with respect to the NPWS Estate.
- 71. Recognise that the NPW Act is NSW legislation that protects and conserves natural values as landscapes and biodiversity on land administered under that Act.
- 72. Recognise Corrabare North FR, and the reserve's role in the delivery of the NSW Government's stated commitments under the NSW Koala Strategy 2018 and in its purpose in the protection of significant native flora and habitat values relevant to its declaration as a flora reserve under the Forestry Act.
- 73. Recognise Lot 165 DP755219 as offset lands, with the perpetual lease vested in the NSW Minister for the Environment consistent with the terms of the Voluntary Planning Agreement accepted as part of a Part 3A of the EP&A Act planning approval. Consider the implications of the project (including the scope of works proposed for the Crumps Road works) on the offset lands, and calculate the residual impact under the BDAR.

Response

70, 71, 72, 73. A revised BDAR (*Appendix E (Revised biodiversity development assessment report of the Amendment Report)*) has been prepared in close consultation with the CHPR team of DCCEEW to ensure it meets the requirements of the *Biodiversity Conservation Act 2016*. Lot 165 DP 755219 is recognised as an offset site for Huntlee New Town development, the HTP corridor would not impact this lot.

In the northwest corner Crumps Road traverses this lot for 140 metres, this is a 10 metres wide haulage road in good condition and is unlikely to require upgrading.

The revised BDAR has taken a conservative approach and assessed an impact width of 20 metres to this section of road, if this upgrade work occurs NPWS will be notified, and a proportionate offset response will be provided.

Summary of issue

Consider as part of the Strategic Offset Delivery Agreement (SODA) preparation:

- 74. Recognise NPWS as a key agency in the preparation of the SODA, so that the agreement will specifically address offset obligations associated with the loss of land and natural values on the NPWS estate, including the perpetual lease acquired as an offset for MP10_0137.
- 75. Consider the NPWS policy and procedures in the acquisition and reservation of potential areas suitable for addition to the NPWS estate.
- 76. Ensure, consistent with the nature-positive provisions of the *Biodiversity Conservation Act 2016*, that the SODA considers species focused programs for the koala to account for the loss of forest in Corrabare North FR which was protected as part of the *NSW Koala Strategy 2018*.

Response

74, 75, 76. The biodiversity offsets for the project will be carried out in accordance with the Hunter Conservation Investment Strategy. The Hunter Conservation Investment Strategy acknowledges that it has been informed by the *National Parks Establishment Plan and NSW Koala Strategy*. Section 3.1 of the Strategy describes the National Parks and Wildlife Service reserve acquisition program, and how this program could contribute to Hunter conservation priorities.

To offset the impacts of the HTP under the Biodiversity Offsets Scheme, EnergyCo will enter into a SODA under section 6.3A of the *Biodiversity Conservation Regulation 2017*.

Under the SODA, the Environment Agency Head (Secretary of DCCEEW) will assume responsibility for the delivery of the HTP biodiversity offsets.

Offset delivery has not yet commenced, EnergyCo can facilitate consultation between NPWS and CPHR (as the delivery lead) to support consideration of NPWS recommendations for conservation outcomes. However, responsibility for offset delivery will be fully transferred to the Environment Agency Head under the agreement.

8.6.10 Environmental quality on the NPWS estate

Summary of issue

NPWS recommends as part of the EIS addendum report to:

77. Confirm consideration of park users and visitors on the NPWS estate as ‘sensitive human receivers’.
78. Confirm that the NPWS estate forms part of the ‘sensitive ecological receiver’ definition.

Response

77, 78. EnergyCo acknowledges NPWS’s request to confirm the consideration of park users, visitors and ecological values on the NPWS estate within the air quality assessment.

As described in *section 5.1.3* of the Air quality and greenhouse gas assessment (see *Technical Report 18 – Air quality and greenhouse gas assessment*), and consistent with Institute of Air Quality Management (IAQM) (2024) Guidance on the assessment of dust from demolition and construction, a *human receptor* includes any location where people may experience dust or particulate matter impacts, including amenity areas. All sensitive receivers including recreational receivers within the air quality study area have been considered in *section 6.17* of the Amendment Report.

IAQM also defines an *ecological receptor* as sensitive habitat that may be affected by dust deposition, including vegetation, aquatic ecosystems and associated fauna. Areas of the NPWS estate that support biodiversity values identified in the Biodiversity development assessment report (see *Technical Report 1 – Biodiversity development assessment report* and *Appendix E (Revised biodiversity development assessment report* of the Amendment Report) were therefore considered ecological receptors for the purposes of the air quality assessment.

The outcomes of the dust risk assessment are summarised in *Technical Report 18 – Air quality and greenhouse gas assessment*) and *section 6.17* of the Amendment Report. Mitigation measures recommended to manage dust risks are provided *Appendix D (Updated mitigation measures)* of the Amendment Report. Dust deposition on ecological receptors may cause short-term stress to vegetation by coating foliage and inhibiting photosynthesis; however, the assessment notes these effects are expected to be highly localised, temporary and typically reduced by natural rainfall.

The EIS acknowledges that the State forests and NPWS estate are used for a range of recreational purposes including camping, walking, four-wheel driving and trail riding. These uses were considered in the assessment of:

- air quality impacts (refer to *Technical Report 18 – Air quality and greenhouse gas impact assessment* of the EIS and *section 6.17* of the Amendment Report)
- noise and vibration impacts (refer to *Technical Report 8 – Noise and vibration impact assessment* of the EIS and *Appendix L (Noise and vibration impact assessment addendum)* of the Amendment Report).

Passive recreational receivers have been considered in the *Technical Report 18 – Air quality and greenhouse gas assessment*. The air quality assessment was updated to include active receivers in *section 6.17* of the Amendment Report however campgrounds and general recreational areas within the NPWS estate are located outside of the required assessable area (i.e. more than 250 metres) and were not included as the risk of impacts would be negligible due to distance.

The EIS considered noise impacts on sensitive receivers (see *Chapter 16 (Noise and vibration)*) and *Technical Report 8 – Noise and vibration impact assessment* including passive recreation areas within the study area. *Appendix L (Noise and vibration impact assessment addendum)* of the Amendment Report assessed noise and vibration impacts of the amended project on sensitive receivers including passive and active recreation areas within the study area. Construction noise levels at the nearest NPWS receivers include the Abbots Falls Walking Trail and the Wishing Well Picnic Area (immediately adjacent Martinsville Hill Road) where noise levels of are expected to exceed the NML by four decibels and >20 decibels respectively.

Summary of issue

NPWS recommends including as part of the NVIA addendum report to:

79. Confirm consideration of park users and visitors on the NPWS estate as ‘sensitive human receivers’, and the recreational/social values attributed to nature-based recreational values of the NPWS estate.
80. Include as part of the NVIA addendum report to confirm that the NPWS estate was considered as part of the sensitive ecological receiver and explain how this was considered with predicted noise levels over 40 dBA, which are known to affect and displace wildlife. Include an explanation of adequate mitigation to acknowledge and monitor biodiversity impacts for noise and vibration.
81. Consider application of the NPWS Policy Landslides and rockfall policy and procedures as part of the vibration impacts and management of risk as it relates to the NPWS estate.

Response

79, 80. *Technical Report 1 – Biodiversity development assessment and Appendix E (Revised biodiversity development assessment report)* of the Amendment Report discuss residual indirect impacts on biodiversity in relation to reduced viability of adjacent habitat due to noise, which was assessed to be negligible. This was because a short-term increase in construction noise was expected to be mostly limited to daylight hours and unlikely to have long-term adverse effects on the viability of adjacent habitats as they would be short-term in nature only.

Construction noise was assessed in accordance with the Interim Construction Noise Guideline (ICNG) (NSW Department of Environment and Climate Change [DECC], 2009). The ICNG sets out noise management levels for passive and active recreation areas with an external LAeq (15 minute) noise level of 60 dBA applied for passive recreation areas (campsites, picnic areas, etc) and 65 dBA for active recreation (bushwalking, mountain biking, etc). It is not considered reasonable to assume that all areas of NPWS estate are accessible to the public (and NPWS actively discourages bushwalkers to stray from tracks to minimise potential impacts to vegetation and habitat) and as such noise impacts have been assessed at publicly accessible areas that are reasonably expected to in use during construction.

As noted above, construction noise levels at the nearest NPWS receivers include the Abbots Falls Walking Trail and the Wishing Well Picnic Area (immediately adjacent Martinsville Hill Road) where noise levels of are expected to exceed the NML by four decibels and >20 decibels respectively.

81. The NPWS Policy Landslides and rockfall policy and procedures typically apply to geotechnical type works. However, from a vibration perspective, sensitive geological features generally have a vibration limit of 50 millimetres per second and as such would not extend past the project footprint,

making the chance of rockfall and landslides minimal. The mitigation measures to minimise vibration impacts included in NV7 are considered appropriate to manage any vibration impacts caused by the project. Refer to *Appendix D (Updated mitigation measures)* of the Amendment Report.

Summary of issue

NPWS recommends including as part of the LCVIA addendum report to:

82. Consider the impacts of dust deposition on the frog ponds in Jilliby SCA (as a specific example of a sensitive ecological receiver on the NPWS estate).

Response

82. As outlined in *section 22.1.1* of the EIS, the risk of dust impacts on ecological receivers within 50 metres of the project impact area was assessed in accordance with the Guidance on the assessment of dust from demolition and construction (Institute of Air Quality Management (IAQM), 2014). Transmission line work (including access tracks), which would capture the proposed work in Jilliby SCA, was assessed as having a low to medium unmitigated risk of dust impacts. The residual dust risk to the surrounding area, including ecological receivers, is considered negligible for all construction activities with implementation of a construction air quality management plan and the mitigation measures outlined in *section 22.1.5* of the EIS.

Residual indirect impacts on biodiversity in relation to reduced viability of adjacent habitat due to dust, were assessed as negligible (refer to *Appendix E (Revised biodiversity development assessment report)*). This is because increased dust associated with permanent vegetation clearing is expected to be limited to disturbance area A. The spread of dust is expected to be buffered by disturbance area B where partial clearing would occur and vegetation below two metres growth height would remain. Beyond the easement, dust impacts are likely to be limited, short-term in nature and adequately managed by mitigation measures.

8.6.11 Engagement

Summary of issue

NPWS recommends including as part of the future environmental management planning conditions:

Identify NPWS as a key agency where construction will affect the NPWS estate, and ensure its involvement in the preparation of relevant environmental management plans.

Response

83. The HTP approval will require the preparation of a suite of environmental management plans, including biodiversity, bushfire, social impact, and traffic and transport plans. Where construction activities have the potential to affect the NPWS estate, NPWS will be identified as a key consultation agency in the preparation of relevant management plans, as determined by the consent authority.

8.6.12 Other matters

Summary of issue

While NPWS have concerns about the level of information provided in the EIS, NPWS wishes to assure that they are fully supportive of the project.

Response

EnergyCo acknowledges NPWS's support for the project and appreciates its constructive approach to identifying where further clarity or information would assist. EnergyCo will continue to work closely with NPWS to address the matters raised and to support ongoing protection of the environmental and recreational values of the NPWS estate.

8.7 Department of Planning, Housing and Infrastructure – Hazards

The Department of Planning, Housing and Infrastructure – Hazards (herein referred to as DPHI – Hazards) provided advice on public exhibition of the EIS at an unspecified date. In general, DPHI – Hazards made recommendation with respect to the assessment of hazards and risks in the EIS. Consideration of the items raised in their advice is provided in the following sections.

8.7.1 Comments on preliminary risk screening

Summary of issue

DPHI – Hazards' review of the EIS confirmed that the HTP is not considered potentially hazardous under Chapter 3 of *State Environmental Planning Policy (Resilience and Hazards) 2021* (Resilience and Hazards SEPP), and a preliminary hazard analysis is not required. The submission noted that the EIS did not include assessments relating to high-pressure gas pipelines as mentioned in the SEARs but verified however that the HTP corridor is not located within the notification areas of the pipelines considered in clause 2.77 of the Transport and Infrastructure SEPP to require assessment. DPHI – Hazards nonetheless requested that any submissions from pipeline operators be referred to DPHI – Hazards such that a response can be provided to them accordingly.

Response

EnergyCo acknowledges DPHI – Hazards' advice that the HTP corridor is not located within or close to notification areas for high-pressure gas pipelines licenced under the *NSW Pipelines Act 1967* and therefore is not precluded on this basis. Should any submissions be received from pipeline operators (such as Jemena or Ampol), EnergyCo will refer them to DPHI – Hazards for review and response.

8.8 Department of Primary Industries and Regional Development – Agriculture

The Department of Primary Industries and Regional Development – Agriculture (herein referred to as DPIRD Agriculture) has submitted a response to the public exhibition of the EIS dated 24 September 2025. Consideration of the items raised in their advice is provided in the following sections.

8.8.1 Comments on management and mitigation

Summary of issue

DPIRD Agriculture noted the following in terms of the management and mitigation of agricultural impacts including impacts on agricultural operations:

- property management plans should be developed in consultation with directly impacted properties
- biosecurity management plans should be prepared in consultation with landowners and relevant local council biosecurity officers
- decommissioning and rehabilitation of all temporary infrastructure should be completed post-construction
- rehabilitation plans should be developed in consultation with landowners, where disturbed areas will be returned to pre-construction condition, and documented in property management plans
- continued engagement with affected landowners and stakeholders should be essential to ensure the effective implementation of these measures.

Response

DPIRD Agriculture comments on proposed mitigation measures are noted. As discussed in *sections 5.10.1 and 5.10.3* of this Submissions Report, EnergyCo is committed to working with directly impacted landowners for the development of property management plans, biosecurity management plans, and rehabilitation plans, consistent with proposed mitigation measures LP2, AG3 and SL3 respectively. Refer to *Appendix D (Update mitigation measures)* of the Amendment Report for further details.

EnergyCo acknowledges that continued engagement with affected landowners and stakeholders will be critical to the effective implementation of these mitigation measures.

8.9 Department of Primary Industries and Regional Development – Fisheries

The Department of Primary Industries and Regional Development – Fisheries (herein referred to as DPIRD Fisheries) has submitted a response to the public exhibition of the EIS dated 25 September 2025. Consideration of the items raised in their advice is provided in the following sections.

8.9.1 Management and mitigation

Summary of issue

DPIRD Fisheries raised no concerns or objection to the outcomes assessed in the EIS, BDAR, and Aquatic Biodiversity Impact Assessment. DPIRD Fisheries recommended the following as inclusions as Conditions of Approval for the HTP:

- waterway crossings should be designed and constructed in accordance with the national guidelines entitled '*Why do Fish Need to Cross the Road? Fish Passage Requirements for Waterway Crossings*' (Fairfull and Witheridge 2003)
- environmental safeguards should be used during the works to ensure that there is no escape of turbid plumes into the adjacent aquatic environment
- any material removed from the waterway that should be temporarily deposited or stockpiled on land is to be located well away from the waterway and to be contained by appropriate sediment control devices
- DPIRD Fisheries and the NSW Environment Protection Authority should be notified immediately if any fish kills occur in the vicinity of the works. In such cases, all works other than emergency response procedures are to cease until the issue is rectified and approval is given by DPIRD Fisheries and/or the NSW Environment Protection Authority for the works to proceed.

Response

The project has generally committed to the requirements recommended by DPIRD Fisheries as follows (refer to *Appendix D (Updated mitigation measures)* of the Amendment Report):

- mitigation measure B16 requires watercourse crossings to be designed in accordance with the guidelines '*Why do Fish Need to Cross the Road? Fish Passage Requirements for Waterway Crossings*' (Fairfull and Witheridge 2003)
- mitigation measure SW10 requires dewatering through a filter sock (or similar) or via transportable sedimentation tanks if the discharge water is highly turbid to minimise sedimentation
- mitigation measures SW8 provides measures to manage runoff from spoil piles, topsoil stockpiles and other excavated material, including consideration of their location and the need for sediment controls to be established

DPIRD Fisheries and the EPA will be notified if any fish kills occur in the vicinity of works as required.

8.10 Department of Primary Industries and Regional Development – NSW Resources

The Department of Primary Industries and Regional Development – NSW Resources (herein referred to as DPIRD NSW Resources) has submitted a response to the public exhibition of the EIS dated 23 September 2025.

8.10.1 Comments on management and mitigation

Summary of issue

DPIRD NSW Resources acknowledges the EIS' identification of multiple exploration and mining titles intersecting the project impact area as well as the planned consultation to be undertaken with title holders during the project design and construction. The submission included the following recommendations with respect to future stakeholder engagement:

- that EnergyCo actively monitor the MinView map viewer to monitor mining title changes that may interact with the project
- ongoing consultation with Subsidence Advisory NSW given that the project intersects two Mine Subsidence Districts
- ongoing consultation with mine operators through construction and operation of the project such that potential safety interaction issues are addressed as required.

Response

EnergyCo is committed to the requirements recommended by DPIRD NSW Resources through the following mitigation measures (refer to *Appendix D (Updated mitigation measures)* of the Amendment Report):

- LP6 requires that mine operators will continue to be consulted throughout detailed design such that interface risks including any potential safety interaction issues are resolved as required
- LP7 requires that DPIRD NSW Resources (including Subsidence Advisory NSW) will continue to be consulted as part of detailed design and throughout construction risks associated with mine subsidence.

The MinView map viewer will continue to be reviewed for mining title changes during detailed design, and during the development of the issue-specific environmental management plans to manage potential interactions with the HTP.

8.11 Transport for NSW

Transport for NSW (herein referred to as TfNSW) has submitted a response to the public exhibition of the EIS dated 23 September 2025. Consideration of the items raised in their advice is provided in the following sections.

TfNSW requested additional information on five key issues, as outlined in Attachment A to its advice, and requires this to be incorporated into a revised traffic and transport impact assessment and the EIS (where applicable) to be submitted with the Submissions Report. The revised assessment must clearly identify all changes, either by tracked changes or an accompanying change table.

8.11.1 Requirements for access tracks with direct connection to the State road network

Summary of issue

TfNSW requested that additional information is provided within a revision to the traffic and transport impact assessment (TTIA) to ensure the traffic assessment is based on the conservative scenario and will mitigate the project's impacts to the State road network.

TfNSW stated that the TTIA indicated that within *Table 5.5*, that intersection treatments are required for each access track with direct access to the state road network, however, *Table 5.9*, states that no intersection treatments will form part of the project scope. The TTIA does not recommend alternative mitigations or commitments to address the safety concern of turning and through traffic movements on the State road network, instead of the provision of intersection treatments.

TfNSW advised that *Appendix H (Revised traffic and transport impact assessment)* of the Amendment Report is to address the safety concerns and proposed alternative mitigation measures, and recommends that for TfNSW to support alternate enforceable traffic mitigation measures, the updated TTIA will need to demonstrate the following:

- avoidance of the AM/PM network peak hours
- the hourly and peak hour traffic volumes (if the network peak hour cannot be avoided) must be similar to the traffic volumes that would be typical in the network AM/PM peak hour to the existing land use of the project site
- elaborate on the requirements for achieving a compliant Safe Intersection Sight Distance (SISD), as it is a crucial safety measure that must be met
- implement carpooling and shuttle bus strategies to reduce traffic volumes
- Traffic Guidance Schemes (TGS) are proposed, then a draft or indicative TGS would need to be submitted to TfNSW to review, and
- the time limit of the use of the access must not exceed 12 months and must not be used for any other operational or maintenance purpose for the project.

TfNSW stated that if the alternative traffic mitigation measures cannot be committed, or the information provided does not address how the measures will be adhered to, then the intersection treatments identified for state road and access track connection will be required, and strategic

concept designs (refer to the fact sheet within the advisory notes) must be submitted as part of the Submissions Report (and revised TTIA).

TfNSW also stated that the figures on footnoted pages 5 to 9 identified several access tracks in purple lines. All access tracks to the State road network are to be clearly identified and assessed for use in *Appendix H (Revised traffic and transport impact assessment)* of the Amendment Report.

Response

The impact assessment has been revised in consultation with TfNSW to account for a more conservative assumption in which the HTP peak construction volume would occur during the AM and PM peak (with some exceptions) as well as the inclusion of a quantitative cumulative assessment at State road intersections. The assessment outcomes are presented in section 6.5 of the Amendment Report and are discussed further in section 8.11.2 of this Submissions Report. Further, *Appendix H (Revised traffic and transport impact assessment)* of the Amendment Report has been restructured to provide a clearer delineation of the potential impacts on the State road intersections in *section 5.3.2*, and the regional and local road intersections in *section 5.3.3*.

Table 5.5 in Technical Report 4 – Traffic and transport impact assessment of the EIS presented a series of general design considerations for access tracks intersecting with public roads, while:

- *Table 5.9* presented the outcomes of the turn warrant and SISD compliance assessments, and if action (upgrade) was required
- *Table 5.14* summarised the proposed road upgrades
- *Table 5.15* summarised the proposed intersection upgrades with cross reference to the strategic concept designs provided in *Appendix E of Technical Report 4 – Traffic and transport impact assessment*.

It is acknowledged that there were some discrepancies between *Table 5.9*, *Table 5.14* and *Table 5.15* in *Technical Report 4 – Traffic and transport impact assessment* in the EIS. This has been corrected in *Appendix H (Revised traffic and transport impact assessment)* of the Amendment Report, with *Table 5-62* and *Table 5-63* presenting the consolidated list of road and intersection upgrades respectively. The tables have been arranged by the relevant road authority which is in turn reflected in the revised project description (refer to *Appendix A* of the Amendment Report).

The EIS and *Technical Report 4 – Traffic and transport impact assessment* identified seven State road intersections that would be upgraded due to the outcomes of the SISD, swept path and/or turn warrant assessments. This includes new or existing access track connections. The exhibited *Technical Report 4 – Traffic and transport impact assessment* identified a further three State road intersections would experience poor performance outcomes with and without the project during the peak construction year. In these instances, an upgrade was not identified in the EIS or *Technical Report 4 – Traffic and transport impact assessment* of the EIS because:

- an upgrade to the intersection is planned by TfNSW which would address the intersection performance impacts (Mandalong Road / Freemans Drive / Wyee Road (I-27)). Updated mitigation measure TT12 identified the need for further consultation on the staging / timing of these works to minimise adverse performance and road safety outcomes. Refer to *Appendix D (Updated mitigation measures)* of the Amendment Report for more information

- further investigations would be required at two locations to determine appropriate measures to address intersection performance impacts (New England Highway / Hebden Road (I-01a) and Golden Highway / Range Road (I-10b)). This was reflected in the exhibited mitigation measures TT3 and TT4.

The intersection performance, SISD and turn warrant assessments have been updated and summarised in *section 6.5* of the Amendment Report and *section 5.3.2 of Appendix H (Revised traffic and transport impact assessment)* of the Amendment Report in response to TfNSW feedback and to assess the amendments to the project. This has resulted in the following changes at State road intersections:

- revisions to the strategic concept designs to reflect the revised turn warrant assessment
- removal of the new Putty Road / New access intersection (I-52) following feedback from TfNSW on the performance and SISD assessment outcomes
- addition of a new access track connection at Jerry Plains Road (southbound ramp) (I-69)
- replacement of the exhibited mitigation measure TT3 and TT4 to prohibit or restrict construction vehicle movements during certain times of the day and/or require the use of variable message signs at seven State road intersections as an alternative to intersection upgrades. This includes New England Highway / Hebden Road (I-01a), Golden Highway / Range Road (I-10b) and Wine Country Road Drive / Broke Road (I-14).

For the Mandalong Road / Freemans Drive / Wyee Road (I-27) intersection, the use of this intersection has been retained as it is important in providing access to and from the construction impact area, particularly the Eraring substation and transmission line corridor. To minimise pressure on this intersection, alternative access routes to/from the Freemans Drive construction support site have been included for construction traffic that can avoid this intersection (being traffic travelling to/from the construction impact areas west of the M1 Motorway). Consultation with TfNSW concerning the timing of these works will occur during construction planning in line with mitigation measures TT1 (traffic management plan) and TT12 of the *Appendix D (Updated mitigation measures)* of the Amendment Report.

The revised assessment, mitigation measures and strategic concept designs for State road intersections have been provided to TfNSW during the preparation of the Submissions Report, Amendment Report and *Appendix H (Revised traffic and transport impact assessment)*. Where possible, the strategic concept designs have considered the feedback received from TfNSW (presented in *Appendix E of the Appendix H (Revised Traffic and transport impact assessment)* of the Amendment Report. Consultation with TfNSW, as the relevant roads authority, on the designs will continue once the project advances to detailed design and ahead of seeking approval under section 138 of the Roads Act.

Regarding specific items raised by TfNSW in the case of alternative enforceable traffic mitigation measures:

- restrictions or prohibition of construction vehicles at certain times of the day at seven State road intersections due to the addition of project or cumulative construction traffic volumes, and provision of variable message signs (revised mitigation measure TT3). With the exception of the Mandalong Road / Freemans Drive / Wyee Road (I-27) intersection, all other State intersections

perform at an acceptable level of service and/or do not require upgrades in response to SISD or turn warrant assessments

- while the assessment has not assumed to use of carpooling or bus shuttles, the use of shuttle buses would be used as far as practicable and is reflected in the amended mitigation measure TT4
- while it is likely that traffic guidance schemes will be used at work sites for temporary traffic management, they do not form part of the approvals submission at this stage and reference to them has been removed
- the access requirements would exceed 12 months and would be designed to provide access during operation for maintenance purposes. The peak HTP construction volumes have been assessed in the revised assessment the network AM/PM peak periods (where relevant) to demonstrate impacts would be acceptable or where additional mitigation measures are required to minimise impacts to the road network. The exception is the new access intersection on the Golden Highway (Putty Road) (I-52), which has been removed from the project.

An updated figure has been provided in *Appendix H (Revised traffic and transport impact assessment)* of the Amendment Report to improve clarity on where access tracks connect to the State, regional or local public road network. For State roads, direct access connections are only proposed at two existing accesses on the Golden Highway (I-31 and I-32) as well as a new access at Jerry Plains Road (southbound ramp) (I-69). As identified earlier, *Appendix H (Revised traffic and transport impact assessment)* of the Amendment Report has also been restructured to consolidate the description and assessment of intersections with the State road network, including access track intersections (refer to *section 5.3.2 of the Appendix H (Revised traffic and transport impact assessment)* of the Amendment Report).

8.11.2 Traffic assessment requirements applicable to all intersections

Summary of issue

TfNSW identified the need for a robust and transparent intersection assessment in the revised TTIA. TfNSW stated that this is crucial to determine if the scope of works adequately addresses the project's impacts or if traffic mitigation measures are required to ensure compliance with the project's scope of works, as currently presented within the exhibited TTIA.

In making this statement, TfNSW identified the following:

- a) Individual traffic count surveys have not been completed at all state and local road intersections, with midblock traffic counts being completed as an alternative. TfNSW, as part of the request for SEARs for the project, advised that individual traffic count surveys were required for each intersection that forms part of the project construction routes, as midblock traffic counts do not clearly depict the background through and turning movements that occur at each intersection. Traffic count surveys are to be completed for each local road and state road intersection shown in the table. The turn warrants and SIDRA analysis are to be revised based on the outcome of the individual traffic counts for each intersection.

- b) The turn warrants and SIDRA analysis have been based on the construction peak hour (6-7am and 5-6 pm) instead of the network peak hour and therefore do not represent the worst-case scenario for the project and limit the project's peak traffic movements to the project peak hour and prohibit traffic movements from occurring during the network peak hour. If this is the intention, further mitigation measures will be required to ensure the project can adhere to the restrictions for project traffic movements. If this is not the intention, the peak project traffic movements during the project peak hour must be included in revised turn warrants and SIDRA analysis to represent the worst-case scenario.
- c) The traffic volumes identified as the worst-case scenario in Table 5.4 for peak hourly Construction Traffic Generation at the construction support sites do not align with the traffic volumes that inform the turn warrants assessment in Appendix C. For example, at Hebden Road, turn warrant construction traffic assessed in AM peak hour equates to a total of 90 (lv/hv) versus the worst-case scenario assumed in Table 5.4 of 103 total lv/hv movements. The turn warrants assessment is to align with the peak traffic volumes identified in Table 5.4.
- d) Turn warrant assessments and SIDRA analysis assumptions for traffic volumes do not represent the worst-case scenario. Currently the cumulative traffic volumes of approved projects and projects that have been given access rights to Renewable Energy Zones (REZ) zones have not been factored into the assessment which was confirmed by EnergyCo in the meeting with TfNSW on 17 September. To ensure the project can appropriately mitigate its impact on the transport network, revised SIDRA and turn warrants assumptions should be considered and results updated. Justification should be included in the updated TTIA for any approved project that is not included in cumulative assessment.
- e) The turn warrants also appear to have been plotted as individual points on the turn warrants assessment graphs and not as one point that is the collective traffic volume for the turning traffic volumes. The turn warrants assessment for all intersections and access tracks are to be replotted as one plot point for the AM/PM peak hours.
- f) The SIDRA analysis is required to be updated based on the revised traffic data and inclusion of cumulative traffic volumes from other projects (as per point d) that will be present in the background and turning volume for each intersection and state road connection. TfNSW noted that the current assessment identifies the following intersections as nearing capacity (from a LOS, DoS, or 95th queue length perspective) and may require further mitigation measures to address the project's additional impacts on queue lengths and LOS:
 - i. New England Highway/Hebden Road (LoS failing in 2028) (I-01a),
 - ii. Golden Highway / Range Road (failing in 2028) (I-10b),
 - iii. New England Highway / Lemmington Road (I-02),
 - iv. New England Highway /Pikes Gully Road (I-02a),
 - v. Golden Highway / Gouldsville Road (I-07),
 - vi. Golden Highway / Mitchell Line of Road (I-10), and
 - vii. Putty Road (Golden Highway) / Broke Road (I-09).

- g) The TTIA intersection layouts within Appendix C, Tables C.1 to C.41 identifies all traffic movements coming from one direction and turning into the project site instead of being distributed between both the left and the right turn from the state road to the local or access track. TfNSW advised EnergyCo on the 17th of September that the assessment of all traffic turning in one direction would be limited to using the relevant turning direction that has been assessed, and no enforceable mitigation measures have been identified in the exhibited TTIA to support the prohibition. If the project wants to maintain the existing ban on the turn directions (i.e. in the right turn), further mitigation measures will need to be identified to ensure monitoring and compliance with the prohibitions or revised assumptions to include the traffic being distributed in both directions will need to be submitted.
- h) The turning volumes at the AM/PM peak hour for each intersection based on direction within the column titled 'HTP 2028 with construction peak volumes' of Table C.1 to C.41 within Appendix C do not align with the turn warrants assessment graph provided in the column titled 'Turn Warrants Assessment' for each intersection and access track with direct connection to the state road network. TfNSW requested that Table C within Appendix C is reviewed in relation to this point and revised to align with the correct turning volumes and distribution assumptions.
- i) Cumulative impacts of high-risk OSOM movements to the CWO REZ will need to be considered for the project. The Golden Highway is the key transportation route to the CWO REZ and is being upgraded by EnergyCo to accommodate these vehicles. The HTP will need to consider the impact of its project as the timing of movements will overlap.

Response

The impact assessment has been revised with regards to the construction scenarios, SISD and turn warrant assessments since the exhibition of the EIS and TTIA, in consultation with TfNSW. *Appendix H (Revised traffic and transport impact assessment)* of the Amendment Report has been restructured to provide a clearer presentation of the project's impacts on the State, regional and local road network.

Responses to the specific matters identified in TfNSW's submission is provided below.

Traffic count surveys (item a)

In October 2025, additional traffic counts were completed at five State road intersections that would be used by construction access routes within the study area, specifically:

- Golden Highway / Existing Track Across Rail Track (I-32)
- Golden Highway / Unknown Road (east of Lemington Road) (I-33)
- New England Highway / Thomas Mitchell Drive (I-59)
- Denman Road / Thomas Mitchell Drive (I-60)
- Denman Road / Edderton Road (I-61).

Where new surveys have been completed, turn warrants, SISD and SIDRA analysis have been updated in *Appendix H (Revised traffic and transport impact assessment)* of the Amendment Report.

The locations of the additional surveys were presented and discussed with TfNSW. As discussed with TfNSW, surveys have not been completed at intersections that have been identified as OSOM construction routes (except where these overlap with the general construction routes), given the low volume and nature of these movements.

Network peak hour assessments (item b-h)

As requested by TfNSW, the intersection performance (SIDRA) and turn warrant assessments have been updated to assess the AM and PM network peak (1 hour) with the project only (applying peak HTP traffic volumes) in combination with other major projects (cumulative). The exception to this approach, as discussed with TfNSW, is when the AM network peak occurs early in the morning (5am to 6am) prior to commencement of construction. In these limited instances, the HTP peak hour (6am to 7am) has been assessed instead. This approach was developed in consultation with TfNSW. Further detail on the outcomes of this revised assessment for State road intersections are presented in section 6.5 of the Amendment Report and sections 5.3.2 and 7.2.1.2 of *Appendix H (Revised traffic and transport impact assessment)* of the Amendment Report.

The selected projects considered in the quantitative cumulative assessment was developed in consultation with TfNSW and includes assumptions for construction vehicle movements attributed to renewable energy projects (including those in the Central-West Orana REZ and the New England REZ) in addition to projects in the study area that have publicly available traffic impact assessments. The renewable energy projects and assumptions applied in the assessment have been developed in consultation with TfNSW, and capture those that are at:

- an EIS exhibition stage or later in the NSW planning process (as of late 2025)
- have the potential to use construction routes from the Port of Newcastle and common State road networks with HTP (for example, the Golden Highway).

This represents a worst-case cumulative scenario as it assumes an overlap of all identified projects with HTP in 2028 and is inclusive of renewable energy projects that have not yet been granted access rights with REZs.

The volume and directions of travel assumed for construction vehicles at each assessed intersection during the assessed peak period are depicted for each State road intersection in *Section 5.3.2 of Appendix H (Revised traffic and transport impact assessment)* of the Amendment Report. These assumptions are considered valid and represent a conservative assessment, as it assumes that the peak movement occurs at all intersections and reflects the expected direction of travel during the AM or PM peak period.

As identified in *section 8.11.1* of this Submissions Report, additional mitigation measures have been identified in addition to the intersection upgrades. This is either the result of project only movements during the assessed peak hour, or the result of cumulative impacts during the assessed peak hour. For the listed intersections in the TfNSW submission, the revised assessment found that:

- New England Highway / Hebden Road (I-01a) – The intersection would perform at a Level of Service (LOS) F in the AM project peak (6am to 7am) and PM network peak (4.45am to 5.45pm) for all assessed scenarios (without and with project, and cumulative). The poor performance is associated a turning movement which the project does not generate during the network peak or project peak hour. Revised mitigation measure TT3 includes restrictions to project-related movements during these periods.

- Golden Highway / Range Road (I-10b) – The intersection would perform at a LOS F during the AM project peak (6am to 7am) and the PM network peak for all assessed scenarios (without and with project, and cumulative). As discussed with TfNSW, to address this impact, construction vehicle movements would be restricted during the peak periods and supplemented by the installation of variable message signs to provide advance warning for construction vehicle activity outside the peak periods (refer to revised mitigation measure TT3).
- New England Highway / Lemmington Road. (I-02) – The intersection performs at a LOS E during the PM network peak hour (with project) and performs at a LOS F during the cumulative scenario for both the AM and PM peak hour (cumulative). Revised mitigation measure TT3 includes restrictions to project-related movements prior to 7am and during the PM network peak period.
- New England Highway / Pikes Gully Road (I-02a) – The intersection performs at a LOS E during the AM project peak hour (6am to 7am) without and with project, and deteriorates further to a LOS F during the cumulative scenario. Revised mitigation measure TT3 includes restrictions to project-related movements prior to 7am.
- Golden Highway / Gouldsville Road (I-07) – This intersection performs at a LOS A in all assessed scenarios for both the AM and PM periods.
- Putty Road / Mitchell Line of Road (I-10) – The intersection performs at a LOS B and LOS D during the AM project peak and PM network peak, and deteriorates to LOS E during the cumulative PM peak. Revised mitigation measure TT3 includes restrictions to project-related movements during the PM network peak.
- Golden Highway (Putty Road)/Broke Road (I-09) – The intersection performs at a LOS D and LOS A during the AM project peak and PM network peak, and deteriorates to LOS E during the cumulative AM peak. Revised mitigation measure TT3 includes restrictions to project-related movements prior to 7am.

The restrictions would avoid or limit the contribution of the project to intersections that currently perform poorly without the project, or would deteriorate to an unacceptable level of service.

It has been agreed with TfNSW that physical upgrades would not be required (New England Highway / Range Road (I-10b) and Wine Country Road/Broke Road (I-14)) but other controls (such as variable message signs) would be installed. These requirements have been reflected in the revised mitigation measure TT3. As stated in *section 8.11.1*, the intersection designs have been revised, where relevant, to reflect the revised turn warrant assessments.

The revised SIDRA and turn warrant assessments are presented in *Section 5.3.2, Appendix A and Appendix C of Appendix H (Revised traffic and transport impact assessment)* of the Amendment Report. The revised SIDRA files have been provided separately to TfNSW.

Cumulative high-risk OSOM movements (Item i)

The project would generate 12 high-risk OSOM movements and as subsequently agreed with TfNSW, a comparable cumulative assessment for OSOM has not been completed. EnergyCo will continue to consult with TfNSW concerning the HTP high-risk OSOM movements, which is discussed further in *section 8.11.4* of this Submissions Report.

8.11.3 Requirements for revised strategic designs for the road upgrades identified in the appendix of the TTIA

Summary of issue

TfNSW stated that changes are required to the provided strategic concept designs. TfNSW stated that these must be provided back to TfNSW for review as part of the revisions to the TTIA.

Transport for NSW listed out the following changes it considered would be required:

- General requirements applicable to be implemented for all revisions to the strategic concept designs:
 - i. Typical cross sections demonstrating all drainage requirements have not been provided with the strategic concept designs.
 - ii. EnergyCo is required to clarify the optioning of the scope of road modifications and upgrades presented in the strategic concept designs, in particular, drawing numbers Drawings 2583080-CA-ANC (605-1/2, 606-1/2/3, 607-1/2, 612-1/2, 613-1/2, 617-1/2). A preferred option should be identified.
- Specific requirements applicable to be implemented as part of the revisions to the specified intersections are referenced within this section:
 - i. SISD has been assessed for reaction time 2.0 seconds and not 2.5 seconds for speeds above 100 km/hr. TfNSW noted that in many locations, this may already be achieved however the following intersections are requiring further reassessment to determine if any further mitigation measures or changes to the scope of the project are required to achieve compliance:
 - Golden Highway / Gouldsville Road (I-07)
 - Golden Highway / Long Point Road (I-06)
 - Golden Highway / Range Road (I-10b)
 - Cessnock Road / Oakley Lane (I-21a)
 - Putty Road / Site access (I-52), located 400 metres east of in the intersection of Putty Road / Broke Road, and
 - Access off Putty Road 300 metres west of Loder Creek (I-31).
- Please remove reference to “intersection update is not required” advice that is shown on plan 2583080-CA-ANC-622 relating to the intersection of Golden Highway / Comleroi Road.

Response

Strategic concept designs

The strategic concept designs provided in the exhibited *Technical Report 4 – Traffic and transport impact assessment* have been revised to align with the outcome of the revised turn warrant assessments and further developed including typical cross sections, where appropriate, in response to the feedback provided by TfNSW. Consultation with TfNSW, as the relevant roads authority, on the intersection designs will continue once the project advances to detailed design and ahead of seeking approval under section 138 of the Roads Act.

The options presented in the exhibited *Technical Report 4 – Traffic and transport impact assessment* have been removed, and the statement "intersection update is not required" has been removed from drawing 2583080-CA-ANC-622-1 for the Golden Highway / Comleroi Road intersection (I-04).

SISD assessment

The assessment has applied the SISD criteria (*Austrroads Guide to Road Design Part 4A*) and has been revised for a reaction time of 2.5 seconds and a coefficient of deceleration for a heavy vehicle (0.29). The results for State road intersections are presented in *Appendix B of Appendix H (Revised traffic and transport impact assessment)* of the Amendment Report.

For the specific intersections identified by TfNSW, the revised assessment identified:

- Golden Highway / Gouldsville Road (I-07) is not SISD compliant
- Golden Highway / Long Point Road (I-06) is SISD compliant
- Golden Highway / Range Road (I-10b) is not SISD compliant
- Cessnock Road / Oakley Lane (I-21a) (is a regional/local road intersection) is not SISD compliant
- Putty Road / Site access (I-52) will no longer proceed following discussions with TfNSW on the outcomes of the revised SISD and intersection performance assessments
- Access off Putty Road 300 metres west of Loder Creek (I-31) is SISD compliant.

SISD non-compliance was also identified at the following State road intersections:

- Golden Highway / Lemington Road (I-03)
- Putty Road / Mitchell Line of Road (I-10)
- Wine Country Road / Broke Road (I-14)
- Jerry Plains Road (Southbound ramp) / New access track (I-69).

The intersections with SISD non-compliance indicate that driver sight lines to the intersection are poor and drivers on the main road may be unable to see turning or stopped vehicles at the intersection in a safe time period. In most instances, this is associated with existing vegetation, except at I-10, I-14 and I-69 where road signage or property signage may also impede sightlines. As this analysis has been completed using the latest aerial imagery, the assessment outcomes and the required control would be validated during detailed design (in accordance with mitigation measure TT2). However, controls at State road intersections may include trimming of roadside vegetation, advance warning signs at intersections I-10 and I-14 (such as variable message signs), and temporary relocation of give-way signage at intersection I-69.

8.11.4 Revision to the concept level high-risk OSOM route analysis to address risk to TfNSW assets and scope of road upgrades

Summary of issue

Following review of exhibited TTIA, TfNSW stated that it requires the report to be revised to address the following matters in relation to high-risk oversize/overmass (OSOM) movements.

- a) Laden Dimensions – Provide the full laden dimensions of the high-risk OSOM transformer loads, including overall length, width, height, gross mass, axle and group loadings, articulation count, turning radius, and swept path envelope.

- b) Scope and Concept Design – Clarify the scope of works for all state road infrastructure modifications required between the Port of Newcastle and the Eraring Power Station, supported by Strategic Concept Designs (see Note 1), for each modification identified in Coastal Transport Services’ high-risk OSOM route analysis (Appendix F of the exhibited TTIA).
- c) Consistency Check – The transport operator is to perform a consistency check of the laden transformer dimensions to ensure alignment with the Port-to-REZ works, specifically the Port of Newcastle – Eraring Power Station route segment and Port of Newcastle – Bayswater segment and confirm that the same dimensional assumptions are applied across all assessments.
- d) Route Suitability Re-Assessment – Re-run the high-risk OSOM route analysis using the laden dimensions provided under (a), confirming suitability and constraints (vertical/horizontal geometry, bridge capacity/clearance limits), with particular emphasis on height restrictions along Awaba Road on the approach to the Eraring Power Station.
- e) Additional Destinations – Confirm and, if necessary, revise the high-risk OSOM route analysis for any overmass/oversize loads in the high-risk category that are required to the Olney and Bayswater switching stations. The existing Coastal Transport Services within exhibited TTIA, does not identify a requirement for high-risk OSOM loads.
- f) Program and Mitigation Interface – Confirm the proposed timing of high-risk OSOM movements and identify any mitigation measures required due to interactions with concurrent TfNSW projects or the logistics/operational management of high-risk OSOM movements between the Port of Newcastle and the Central-West Orana REZ.
- g) Swept Path Analysis – Provide a complete, dimensioned swept path analysis for all pinch points along the nominated OSOM route. The current assessment is insufficient as it only circles obstructions and uses arrows to indicate manoeuvres. The revised analysis must include scaled vehicle/load templates, clearance offsets, encroachment details, and demonstrate compliance with Austroads and TfNSW swept path requirements. TfNSW stated that EnergyCo advised on 16 September via email that they had provided the swept paths for the high-risk OSOM in Appendix E; however, on review by TfNSW, what is provided is the swept paths for intersections for project vehicles. Please update the Route Study prepared by Coastal Transport Services, to include the swept paths for the high-risk OSOM from port to site and include swept paths as part of the concept designs for any affected access intersection.

Response

In response to TfNSW, the high-risk OSOM route analysis and swept path analysis has been revised and is presented in *section 5.2.8, section 5.3.4, Appendix E and Appendix F of Appendix H (Revised traffic and transport impact assessment)* of the Amendment Report. Responses to specific matters raised by TfNSW is detailed below.

Laden dimensions (Item a)

A dimensioned diagram of the largest OSOM load and vehicle configuration has been provided in *section 5.2.8 of Appendix H (Revised traffic and transport impact assessment)* of the Amendment Report. The turning radius and swept path envelope of the OSOM vehicles are detailed in the swept path analysis provided in *Appendix F of Appendix H (Revised traffic and transport impact assessment)*.

Further detail on the dimensions is provided in the revised high-risk OSOM route analysis provided in *Appendix E of Appendix H (Revised traffic and transport impact assessment)* of the Amendment Report.

Required adjustments to State road infrastructure to accommodate OSOM movements (Item b)

The swept path analysis provided in *Appendix H (Revised traffic and transport impact assessment)* has confirmed the following adjustments to State road infrastructure, initially identified in the concept level high-risk OSOM assessment:

- Newcastle Road, Jesmond to Wallsend – tree trimming
- Palmers Rd exit, Freemans Waterhole (exit ramp off M1) – temporary removal of signs within medians
- The Boulevarde, Toronto (Awaba Street to Cary Street) – temporary removal of signs and barriers
- The Boulevarde/Cary Street intersection, Toronto – potential relocation of traffic signals
- Mount Waring Road, Toronto – tree trimming
- Unknown, Rathmines – Roundabout at Dorrington and Wangi Road – temporary use of the opposite side of road through roundabout with the temporary removal of signs within the median.

The final requirements would be confirmed during detailed design. TfNSW will continue to be consulted during detailed design on required adjustments to State road infrastructure.

Consistency check with Port to REZ program of works (Item d)

The project would use common routes from the Port of Newcastle to access the Pacific Motorway and Hunter Expressway, and would deviate from the Port to REZ routes:

- to travel south on the Pacific Motorway to access the Olney switching station or the Eraring Power Station
- to travel north by continuing on the New England Highway to the Bayswater switching station north of the New England Highway / Golden Highway interchange.

The longest rigid component and the heaviest component associated with HTP is shorter and lighter when compared to the OSOM components that were considered in the design and route selection for the Port to REZ program of works.

Route suitability re-assessment (Item d)

The revised OSOM assessment and OSOM swept path analysis is presented in *Appendix E and Appendix F of Appendix H (Revised Traffic and transport impact assessment)*. The OSOM route assessment has considered overhead obstruction clearances and known bridge and culvert mass limitations as part of the selection of the most appropriate route for the given components and OSOM vehicle combinations.

The chosen route to the Eraring Power Station has been selected after consideration of multiple bridge and clearance constraints. Utilising Awaba Road avoids height and width restrictions through Morristet. It is acknowledged that there is a bridge height limit of 5.2 metres on Awaba Road. To navigate below the low height bridge, there will be the need to limit the maximum height or configuration of the OSOM trailer.

EnergyCo has provided the detail concerning the OSOM routes and loads to the TfNSW assets/road access team to assess bridge loads. At the time of writing, this advice has yet to be provided to EnergyCo.

Additional destinations (Item e)

The project would require 12 high-risk OSOM loads, 4 of which are anticipated to Bayswater South switching station, and a single high-risk OSOM load anticipated to the Olney switching station. The remainder would travel to the Eraring Power Station.

Following discussions with TfNSW, the concept level high-risk OSOM assessment and swept path analysis has been updated to reflect the high-risk OSOM movements occurring from the Port of Newcastle. This is presented in *Appendix E* and *Appendix F* of *Appendix H (Revised traffic and transport impact assessment)*.

Program and Mitigation Interface (Item f)

As stated above, the project would require a low number of high-risk OSOM movements, and the timing of these movements would be confirmed during construction planning and will be undertaken in accordance with the required permits from the National Heavy Vehicle Regulator. Consultation with Transport for NSW regarding on the use of State roads for OSOM vehicles will continue during detailed design and construction (updated mitigation measure TT9). Any interaction with non-HTP high-risk OSOM movements would be managed through scheduling by the NSW Government and the National Heavy Vehicle Regulator. Refer to *Appendix D (Updated mitigation measures)* of the Amendment Report for more information.

Swept Path Analysis (Item g)

Appendix F of *Appendix H (Revised traffic and transport impact assessment)* has been updated with revised swept path analysis for State road intersections. A revised drawing set was provided to TfNSW since the exhibition of the EIS. TfNSW will continue to be consulted during detailed design on required adjustments to State road infrastructure.

8.11.5 Minor matters that need to be resolved prior to determination

Summary of issue

Transport for NSW identifies several minor matters requiring clarification or resolution prior to determination of the project.

Transport for NSW requests that the following matters be addressed:

- confirm Table 4.1 of the TTIA correctly describes the Hunter Expressway as a four-lane, two-way road
- Table 8.1 of the TIA describes mitigation measures which are suggested to occur post approval, TT1, TT2 and TT3. TfNSW has reviewed the mitigation measures, and these are required to be addressed prior to consent to ensure that the scope of the works necessary to facilitate these measures has been accounted for within the project approval and should not be left to post consent.
- crossover of the Hunter Central Coast Transmission (HCC) and Hunter Transmission line timing and mitigation measures are required to be considered by the project

- stringing sequencing detail should be provided in a Stringing Strategy for the transmission line crossing of the state road network.

Response

Minor error

Table 4-1 of *Appendix H (Revised traffic and transport impact assessment)* identifies the Hunter Expressway as a bidirectional four-lane road (two lanes in each direction)

Mitigation

Mitigation measures in *Table 8-1 of Appendix H (Revised traffic and transport impact assessment)* have been amended to reflect the revised assessment and response to submission. Specific to the mitigation measures identified by TfNSW (refer to *Appendix D (Updated mitigation measures)* of the Amendment Report:

- mitigation measure TT1 sets out the requirements of the traffic management plan, and the requirement to complete this during detailed design and construction planning. This is considered appropriate and standard practice for when management plans are prepared in consultation with relevant road authorities
- mitigation measure TT2 reflects the requirement to complete the road and intersection upgrades in accordance with the descriptions provided in the Amended project description. EnergyCo has undertaken revised assessments and prepared revised strategic concept designs to address the outcomes of this assessment. TfNSW have been provided the revised designs for comment, and where possible, the feedback has also been addressed. Consultation with TfNSW on the designs will continue during detailed design and prior seeking the required approval under section 138 of the Roads Act
- mitigation measure TT3, as exhibited, required that further investigation in completed for the New England Highway / Hebden Road intersection to identify appropriate measures to address intersection performance impacts. This measure has been revised to reflect the identified restrictions and controls as discussed earlier in this section and have been discussed with TfNSW. It also replaces mitigation measure TT4, which required the need for additional investigations to identify the required controls for the Golden Highway / Range Road intersection on the basis this has now been completed in consultation with TfNSW.

Stringing across State roads

The project crosses State roads at two locations:

- the Golden Highway (Putty Road), which is a new transmission line crossing located to the east of Broke Road near Mount Thorley
- the Pacific Motorway, which is an existing transmission line crossing.

The new and existing transmission line structures are located outside the road reserve. The stringing methodology is described in *section A.3.1 and A.3.3 of Appendix A (Updated project description)* of the Amendment Report . Traffic management controls would be detailed in a traffic management plan and implemented at both locations, noting that emergency vehicles would be provided right of way during an emergency. Stringing sites and access tracks to facilitate stringing across State roads have been included in the project.

For the Golden Highway (Putty Road):

- hurdles and cranes would be temporarily required to support the stringing of the transmission line across the state road. These structures may be in the road reserve. If located in the road reserve, the structures would be preferably located outside the road clear zone. If this is not possible, barriers would be required as per the *Guide to Road Design Part 6: Roadside Design, Safety and Barriers Edition 2 August 2010*
- any intermittent closures of the Golden Highway for stringing activities would not exceed 10-minute delays, with stoppages not exceeding five minutes for no more than six times per a day. These would occur outside of peak traffic periods and would not involve full closures or detours. These closures would be associated with the establishment or demobilisation of the temporary structures, noting traffic controls and/or reduction in speed would still be required during the stringing activity as a secondary precaution
- the strategic design for the crossing of the Golden Highway (Putty Road) is provided in *Appendix G of Appendix H (Revised Traffic and transport impact assessment)*.

For the Pacific Motorway, the project involves the strengthening and restringing of two existing towers, which are located on private property and beyond the road reserve for the Pacific Motorway. The use of temporary structures such as hurdles are not anticipated based on the current methodology. Instead, a pulley system located outside the road reserve would be used to guide the earthwire across the existing transmission line over the road corridor. During re-stringing, traffic controls would be implemented to safely manage traffic passing below re-stringing activities as required, including stop/slow signs and/or reductions in speed. These works would typically occur at night-time to minimise disruption and closure or detour of the Pacific Motorway during re-stringing is not proposed.

Stringing is expected to take up to two months, including establishment and demobilisation of associated temporary infrastructure. However, the detailed schedule, methodology (and supporting analysis of queue length) and required traffic management controls would be developed by the construction contractor during detailed design. TfNSW will be consulted on the final stringing methodology, program and traffic management plan ahead of seeking the required approvals from TfNSW.

The Golden Highway is the only common State road crossed by HCC REZ transmission project and HTP projects. The HCC REZ transmission project has multiple crossings of the Golden Highway (Mitchell Line of Road (three crossings), Putty Road (one crossing) and Jerry Plains Slip Road (one crossing). The approximate distance of the closest crossing points to the HTP crossing is approximately three kilometres to the west (Mitchell Line of Road) and approximately 2.3 kilometres to the east (Putty Road).

The potential for cumulative impacts arising from HTP and HCC REZ transmission project will be subject to the final construction schedules and methodologies for both projects.

Detail on the HCC REZ transmission project stringing program and methodology (including the nature, number and duration of intermittent closures) and management requirement was not presented in the associated environmental approvals documentation on the basis that this would be developed ahead of the project seeking the required approvals from TfNSW.

Given the status of information available on the stringing method and program for HCC REZ transmission project and planning stage for HTP, any potential cumulative impacts cannot be quantified at this stage. It is acknowledged that there will be the need to coordinate and manage stringing activities along the Golden Highway to minimise disruption to other road users. As identified in mitigation measure TT15, the methodology and program of stringing activities over the Golden Highway for HTP will be The methodology and program of stringing activities over the Golden Highway for HTP will be coordinated with TfNSW and Ausgrid with consideration of the Hunter-Central Coast REZ transmission project works, scheduled OSOM movements that pass this location and other scheduled road works along the Golden Highway.

8.11.6 TfNSW advisory notes

Transport for NSW notes the following advisory requirements:

- strategic concept designs are required for works along the state road network route
- turn treatments must comply with Austroads Guide to Road Design Part 4A
- safe intersection sight distance must comply with Austroads Guide to Road Design Part 4A and Transport for NSW supplements noting different reaction times
- Austroads design vehicles and turning path templates (AP-G34-23) must be reviewed for swept path analysis
- bridge assessments for TfNSW assets can be obtained by contacting spu@transport.nsw.gov.au
- pavement accommodating project traffic, including high-risk OSOM vehicles, is to consist of permanent treatments consistent with existing state road pavement
- consultation with UGLRL is required if use of UGLRL assets is proposed, and permit requests must be lodged at least two months in advance including vehicle specifications.

Response

Noted.

8.12 Department of Defence – Singleton Military Area

The Department of Defence (herein referred to as Defence) provided a submission on the EIS at an unspecified date. Defence requested ongoing consultation with EnergyCo during detailed of the HTP. Consideration of the items raised in their advice is provided in the following sections.

8.12.1 Future engagement with Defence

Summary of issue

Defence requested that EnergyCo continue to consult with Defence during detailed design, construction, operation and maintenance activities of the HTP such that potential interfaces with Defence operations at the Singleton Military Area can be managed as required. This is addressing Defence requirements in relation to:

- the final coordinates and elevations of transmission lines and tower structures
- electromagnetic interference on communications

- obstacle lighting and marking of cables/lines and structures
- the use of cranes, drones and helicopters during construction.

Response

Consultation has been undertaken with Defence throughout project planning and development as detailed in *Chapter 6 (Engagement)* of the EIS to manage interfaces with Defence operations at the Singleton Military Area. This includes:

- impacts on the Defence road network and traffic movements
- impacts on cultural heritage within Singleton Military Area
- land use impacts and concern about impacts to operational activities on Singleton Military Area
- impacts on aviation operations, telecommunications systems, traffic, security and safety at Singleton Military Area.

EnergyCo is committed to ongoing consultation with Defence during detailed design, construction, operation and maintenance activities of the HTP such that potential interfaces with Defence operations at the Singleton Military Area can be managed as required.

8.13 Forestry Corporation of NSW (FCNSW)

The Forestry Corporation of NSW (herein referred to as (FCNSW)) provided advice on public exhibition of the EIS, dated 24 October 2025. Consideration of the items raised in their advice is provided in the following sections.

8.13.1 Corridor vegetation management and bushfire risk

Bushfire risks – general impacts, management and mitigation

Summary of issue

FCNSW does not support the proposal to retain and maintain vegetation within the transmission corridor to a maximum height of up to two metres, noting that a continuous strip of dense understorey across State forests would create an unacceptable bushfire hazard, increase fire intensity and limit firefighting access. FCNSW considered that the EIS does not provide sufficient detail on how bushfire risks would be managed under this approach. FCNSW recommends a revised strategy that reduces fuel continuity through varied vegetation height zones and strategic breaks, while maintaining biodiversity outcomes.

Corridor vegetation management plan

FCNSW recommended approval conditions requiring a Corridor vegetation management plan (CVMP), prepared in consultation with FCNSW and the NSW Rural Fire Service. The CVMP should outline how vegetation will be managed to minimise bushfire risk and retain ecological values, including:

- strategies to avoid continuous high fuel loads, such as creating a mosaic of vegetation heights and cleared strips (for example, low grass or bare ground fuel breaks at intervals, and only selective retention of taller understorey in patches where it will not create a fire corridor)

- identification of areas where limited canopy or midstorey vegetation can be safely retained (for example, moist gullies), and areas that must be kept largely clear for fire protection (for example, ridge tops and around infrastructure)
- ongoing maintenance methods (for example, periodic slashing or controlled burning) to ensure regrowth does not exceed safe heights or fuel loads.

Bushfire mitigation measures

FCNSW requested that conditions require specific mitigation measures, including perimeter fire breaks or APZ in extreme risk areas, improved firefighting access using the corridor or parallel trails as control lines, and assistance with hazard reduction activities. Regular fuel load inspections should determine when additional fuel reduction works are required.

Audit and adaptive management

Compliance with the CVMP should be independently audited at defined intervals, with results provided to the regulator and FCNSW. If inspections or audits identify elevated bushfire risk, the Proponent should adapt management measures, which may include revising the CVMP or increasing vegetation clearance frequency.

Timing

FCNSW noted that the CVMP should be approved before any clearing or construction works commence in relevant areas, with key mitigation actions implemented before the first summer bushfire season. Ongoing fuel management should be maintained for the life of the project.

Response

The development of a standalone corridor vegetation management plan is not currently proposed as part of the construction or operational phase of the project, however EnergyCo will ensure that appropriate measures will be implemented as detailed in mitigation measure BF7 which details cyclic inspections and control of vegetation within transmission line easements and hazard tree zone will be carried out in accordance with Transgrid standard for Maintenance of Easements and Access Tracks (refer to *Appendix D (Updated mitigation measures)* of the Amendment Report).

EnergyCo acknowledges FCNSW's concerns regarding the proposal to partially retain vegetation within the transmission corridor to a height of two metres. Through further engagement with NSW Conservation Programs, Heritage and Regulation (CPHR), EnergyCo has refined its approach to partial impacts with a more moderate expectation regarding the extent of shrub coverage (understorey) that will be retained within the easement. EnergyCo undertook further modelling of vegetation using the Australian Fire Danger Rating System (AFDRS), in addition to the Forest Fire Danger Index (FFDI) modelling undertaken as part of *Technical Report 14 – Bushfire risk assessment*. Importantly, each set of models detail different outputs, with the FFDI being weather-driven and indicates fire danger severity, whereas the AFDRS considers modelled fire behaviour (mainly fireline intensity).

The additional AFDRS modelling for HTP demonstrates:

- grassland generally exhibits lower flame heights but faster rate of spread
- shrubland ($\leq \sim 2$ metres) can exhibit higher flame heights but slower spread

Neither cover type is inherently “better” given the trade-off associated with rate of spread when compared against flame height. What is known is that there are clear biodiversity benefits associated with the partial retention (partial loss) approach indicated in *Appendix E (Revised biodiversity development assessment report)*. Within disturbance area B, the BDAR has applied a partial loss assessment in accordance with the biodiversity assessment method (BAM). In response to FCNSW’s submission, and in consultation with CPHR, a more conservative application of partial loss has now been applied in the revised BDAR reducing the predicted retention of biodiversity features within disturbance area B.

EnergyCo has received advice from the project’s bushfire consultant, which confirms that the presence of the HTP would not require material changes to established bushfire fighting methods, plans or approaches within State forests. Firefighting operations in these environments are predominantly based on indirect suppression strategies from major strategic roads and trails, particularly during severe fire weather conditions, rather than reliance on direct suppression within understorey vegetation.

Consistent with advice from the project’s bushfire consultant, vegetation height within the corridor is only one of several factors influencing bushfire risk and firefighting effectiveness. Access to strategic fire trails, terrain, weather conditions and the availability of control lines are the primary determinants of bushfire suppression capability. The HTP alignment has been designed to largely avoid key strategic fire trails within State forests and is therefore not expected to materially constrain firefighting access or alter established bushfire fighting practices.

In addition to mitigation measure BF7, EnergyCo is committed to the development of a bushfire management plan in consultation with FCNSW and RFS following approval of the project.

EnergyCo acknowledges the request by FCNSW in relation to the ongoing audit and management of the vegetation within the easement. EnergyCo (and the network operator after approval) is committed to further discussions with FCNSW regarding vegetation management during operations and an appropriate review and adaptive management response protocol.

8.13.2 Biodiversity offsets and habitat connectivity

Management and mitigation

Summary of issue

FCNSW notes that the HTP will clear approximately 661 hectares of State forest native vegetation (and about 49 hectares of hardwood plantation) within the HTP easement. FCNSW states that this clearing will remove or modify habitat for numerous threatened species. The EIS employs a “partial clearing” scenario (retention of low understorey) to reduce offset obligations, but FCNSW is concerned that this underestimates the real impact of the proposed clearing. In practice, removing all tall trees while leaving low vegetation will still constitute a major long-term habitat loss (e.g. loss of tree hollows, canopy cover, and connectivity). FCNSW also notes that the EIS lacks specific commitments to maintain fauna connectivity across the corridor (aside from general mentions of rope bridges, etc.) and contains insufficient detail of edge effects on the remaining forest. Without stronger ameliorating measures, the project could result in fragmented habitats and unaccounted biodiversity losses.

Full habitat offset requirement

FCNSW states that Conditions of Approval should require that biodiversity offsets account for the full extent of habitat loss. All native forest within the corridor should be treated as cleared for offset calculation purposes. That is, there should be no discount for “partial” clearing unless the Proponent can demonstrate, through rigorous evidence, that the retained vegetation will maintain full habitat functionality. This will require the Proponent to retire biodiversity credits or provide offset conservation areas as if the entire ~710 hectares of native vegetation is being removed. This conservative approach ensures no net loss of biodiversity and reflects the uncertainty of the partial retention approach. The additional offset obligation should be confirmed prior to commencement of construction through a revised Offset Strategy or Biodiversity Development Assessment Report submitted to DPHI for approval.

Construction biodiversity management plan

FCNSW recommends conditions requiring the preparation of a construction biodiversity management plan (BMP) prior to clearing, in consultation with FCNSW and relevant regulators. The BMP should include:

- pre-clearing surveys and fauna relocation protocols, including stag-watching for hollow-dependent fauna, presence of fauna spotter-catchers during tree felling, and translocation of displaced fauna (e.g. koalas, frog species such as *Litoria littlejohni*)
- habitat feature salvaging, requiring important elements (hollow logs, tree hollows, bushrock) to be recovered from clearing zones and relocated just outside the easement to enhance surrounding habitat
- habitat connectivity measures, including installing and maintaining wildlife crossing structures (arboreal rope bridges, glider poles, and underpasses where relevant) at regular intervals, identification of target species (e.g. Squirrel Glider, Spotted-tailed Quoll), and monitoring obligations to modify structures if uptake is low
- edge effect mitigation, including weed control to prevent infestations (e.g. lantana), management of bell miner colonies to avoid dieback, and planting of fast-growing native vegetation at selected edge locations to create a buffer microclimate
- revegetation and rehabilitation of temporary disturbance areas (e.g. construction pads, temporary access widening) with native species as soon as practicable.

Edge Effect Mitigation Plan

FCNSW also recommends that conditions require a dedicated Edge Effect Mitigation Plan, either as part of the BMP or stand-alone, to manage indirect impacts on adjacent forest. This plan should include: a weed monitoring and control programme for newly created edges (during and post-construction), measures to prevent erosion and microclimatic stress, and procedures for responding to forest health decline attributable to the project (e.g. invasive species outbreaks). Implementation should commence immediately after clearing and continue for at least the first five years of operation, with annual reporting to DPHI/FCNSW.

Fauna connectivity and monitoring

In addition, FCNSW recommends conditions requiring that all proposed fauna connectivity structures (e.g. glider poles, canopy bridges) be installed prior to operation of each relevant section of transmission line, and that their effectiveness be monitored within two years of installation. If monitoring indicates inadequate use, the proponent must consult with DPHI and FCNSW and implement additional or alternative measures, such as installing additional crossing points or modifying design.

Timing

The revised Offset Strategy (if required by condition 4) should be finalised before any vegetation clearance. The BMP (and any sub-plans including Edge Effect Mitigation) must be prepared and approved before construction commences. Connectivity structures should require to be in place prior to the transmission line being constructed in any relevant section of the line, or at the latest, before it is energised. Monitoring of biodiversity measures should occur during and after construction, with a review (and any necessary adaptive actions) within two years of project operation.

Response

Full habitat offset requirement

EnergyCo acknowledges FCNSW's concerns regarding the partial clearing scenario and the need to justify how the impact has been assessed as appropriate.

The partial clearing aspect of the impact assessment has been outlined and justified in detail in *Appendix M of Technical Report 1 – Biodiversity development assessment report* and *Appendix F (Revised biodiversity development assessment report)*. As outlined in *Appendix M*, following ongoing consultation with the CPHR, a range of assessment approaches to partial impacts and key considerations were identified, with a particular focus on providing a project specific and evidence-based approach. The evidence-based approach includes provision of the results of field-based sampling of partial impacts specific for the project.

A summary of the Vegetation Integrity values determined from the field survey and assessed within the BAM-C for five vegetation formations being Grassy Woodlands, Dry Sclerophyll (Shrub/Grassy), Dry Sclerophyll (Grassy), Wet Sclerophyll Forest (Grassy) and Wet Sclerophyll Forest (Shrub/Grassy) vegetation formations has been provided. The assessment of the field results confirmed:

- electrical transmission lines maintain biodiversity values within easements subject to partial loss with VI scores of between 35 and 53 across the five formations sampled
- electrical transmission line partial impacts reduce VI scores by between 17.6 and 44.8 per cent
- the field-based evidence from electrical transmission lines confirms the retention of biodiversity values, significantly more than the potential full loss scenario.

The estimated biodiversity credit liability requirements for the project have been determined in accordance with the NSW Biodiversity Offsets Scheme for the project. EnergyCo will enter into a SODA with the Secretary of NSW DCCEEW for the project. Under this agreement, responsibility for delivering biodiversity offsets will be transferred to DCCEEW with commensurate funding

Construction biodiversity management plan

As outlined in *section 8.7.1* of the EIS, suitably qualified and experienced biodiversity experts will prepare the BMP, in consultation with relevant government agencies, including CPHR, NPWS and the Australian Government DCCEE. The BMP will include several measures that are recommended by Forestry, including pre-clearing survey procedures, a fauna handling and rescue procedure, salvage of resources, fauna connectivity strategy and a revegetation/rehabilitation plan. As outlined in *section 24.3.1* of the EIS, construction cannot commence until the BMP is approved by the Planning Secretary of the NSW DPHI (unless staging of the BMP is approved).

A range of measures are proposed to mitigate potential habitat connectivity impacts for at-risk arboreal mammals, woodland birds, and semi-mobile terrestrial species. Targeted measures proposed for these species include glider poles and rope bridges in identified Squirrel Glider, Southern Greater Glider, Eastern Pygmy Possum, and Brush-tailed Phascogale habitat. The exact location and design of under-transmission line glider poles and/or rope bridges will be nominated as part of a Connectivity Strategy (refer to mitigation measure B5 as per *Appendix D (Updated mitigation measures)* of the Amendment Report) guided by the locations of habitat connectivity identified in *Appendix F (Revised biodiversity development assessment report)* of the Amendment Report. The Connectivity Strategy will be prepared in consultation with relevant agencies prior to construction.

Weed control measures would be included in the biosecurity management plan that would be prepared in accordance with mitigation measure AG3 (refer to *Appendix D (Updated mitigation measures)* of the Amendment Report).

Edge effect mitigation plan

A dedicated edge effect mitigation plan is not considered to be required as it would duplicate the measures that will already be covered by the BMP, sediment and erosion management measures, biosecurity measures and weed management measures. Duplication of management actions can lead to sub-standard and confusing guides and as such a dedicated edge effect mitigation plan is not proposed to be included. The BMP and associated measures will be prepared in consultation with FCNSW to ensure FCNSW objectives are considered and included.

Fauna connectivity and monitoring

Monitoring of biodiversity measures would occur in accordance with the monitoring program outlined in *section 8.5.2* of *Appendix F (Revised biodiversity development assessment report)* of the Amendment Report and mitigation measure B14 as part of the adaptive management strategy for the project. Updated mitigation measures have been adopted which include monitoring during both construction and operation of the project as per a biodiversity impact monitoring program (refer to *Appendix D (Updated mitigation measures)* of the Amendment Report).

8.13.3 Aboriginal cultural heritage

Avoidance of impacts to Aboriginal heritage

Summary of issue

FCNSW notes that State forests along the HTP corridor contain a large number of Aboriginal cultural heritage sites and artefacts, reflecting long-term Aboriginal use of the landscape. The environmental impact statement identifies 195 Aboriginal sites within the project impact area, including scarred trees, rock shelters with art and deposits, grinding groove sites and artefact scatters. FCNSW considers that the mitigation approach relies heavily on salvage and archival recording rather than exhausting avoidance, protection and in-situ management options. As the project is critical State significant infrastructure, it will not follow the usual Aboriginal Heritage Impact Permit pathway, making it essential that Conditions of Approval impose strict heritage safeguards. FCNSW emphasises that culturally significant sites should be preserved where possible and that Aboriginal stakeholders must be genuinely involved in decision-making and ongoing heritage management.

Avoidance of significant heritage sites

FCNSW recommends the following matters are addressed:

- Conditions of Approval should require the proponent to demonstrate all feasible measures to avoid or minimise harm to Aboriginal heritage sites, including re-design and micro-alignment prior to any ground disturbance, and relocation or amendment of infrastructure (such as access tracks or pole locations) where practicable
- avoidance should apply particularly to sites of high cultural significance (for example, rock art shelters, major grinding groove clusters and unique hydrological features such as the “Wishing Well” spring in Watagans), unless DPHI, in consultation with Heritage NSW and FCNSW, agrees that avoidance is not reasonably practicable
- evidence of attempts to avoid sites, the outcomes of design reviews, and the rationale for any unavoidable impacts should be documented and approved by DPHI before works commence in affected areas.

Response

The *Technical Report 2 – Aboriginal cultural heritage* assessment method is heavily prescribed with regards to the identification and management of cultural materials. At the core of these methods are the need to document cultural materials, and the recovery of any key components where this can be achieved. However, in addition the project included extended efforts to explore cultural values, landscapes and view-lines. This included early and extensive consultation with key Traditional Owners. As such, a range of project specific mitigation measures outlined in *Appendix D (Updated mitigation measures)* of the Amendment Report include directions on management of cultural values, interpretation and post-construction direction of remaining Aboriginal objects, sites and places.

Appendix F (Aboriginal cultural heritage assessment addendum) of the Amendment Report now further considers potential impacts and adopts the disturbance area approach included in *Appendix E (Revised biodiversity development assessment report)* of the Amendment Report, rather

than assuming full impact within the amended project impact area. By adopting various disturbance and no-go areas proposed by the biodiversity assessment, a substantive portion of the identified Aboriginal objects, sites and places would be unaffected by the project (outlined further in *Chapter 8 (Potential and cumulative impacts)* of *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report). In addition, further consideration of impacts and the potential to avoid cultural materials are now proposed in the mitigation measures (specifically mitigation measure AH01 of *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report). This mitigation measure requires all potential impacts to Aboriginal objects, sites and places to be reviewed once a final project design is available to inform micro-siting and further avoidance opportunities.

In addition, 20 Aboriginal objects, sites and places including rockshelters with art motifs and cultural deposits, grinding grooves, stone arrangements and cultural places, are now proposed for avoidance, compared with five proposed in *Technical Report 2 – Aboriginal cultural heritage assessment*.

Furthermore FCNSW is now included in *Appendix E (Post approval requirements – updated guiding principles)* of *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report as requiring consultation in the development of documentation, including the Aboriginal cultural heritage management plan, that would guide and manage cultural materials in State forests through the project.

Management and mitigation

Summary of issue

Aboriginal cultural heritage management plan

FCNSW recommends the following matters are addressed:

- an Aboriginal cultural heritage management plan (ACHMP) should be prepared in consultation with registered Aboriginal parties (RAPs) and FCNSW, and finalised to the satisfaction of DPHI prior to construction, comprehensively detailing how each recorded Aboriginal heritage site or area within the construction impact area will be managed. Key elements should include:
 - the ACHMP should identify sites to be protected in situ, including physical exclusion measures such as fencing, no-go zones and on-ground markings, which must be installed before machinery enters those areas
 - salvage and relocation protocols should clearly identify when excavation or collection of surface artefacts is permitted, and confirm that salvage is only undertaken after avoidance and minimisation measures are exhausted; salvage must be supervised by a qualified archaeologist with RAP representatives present
 - artefacts recovered during salvage must be catalogued and reburied within Country in a designated approved area, or placed in a keeping place nominated by RAPs, ensuring ongoing community access
 - Aboriginal monitors (nominated by RAPs) should be present during initial clearing or ground disturbance works in areas of high sensitivity to identify any previously unrecorded Aboriginal objects or features

- an “unexpected finds” procedure consistent with Heritage NSW guidelines must be implemented, requiring that all works cease, the area be secured, RAPs be notified, Heritage NSW and FCNSW be consulted, assessment by an archaeologist be conducted, and appropriate management responses (such as salvage or avoidance) be determined before works resume
- cultural awareness training should be provided to all project personnel, including information on the significance of Aboriginal heritage in these State forests and their legal obligations to protect heritage
- the ACHMP should include commitments for ongoing consultation with RAPs throughout construction, allowing incorporation of new cultural knowledge that may come to light.

Responsibility and compliance

- Conditions of Approval should ensure the proponent is fully responsible for compliance with Aboriginal heritage protection measures, management actions and any harm to Aboriginal objects caused by the project works, rather than FCNSW
- the proponent should submit a post-construction heritage management report to DPHI and Heritage NSW detailing all heritage actions taken during construction, including sites avoided, sites salvaged, artefact outcomes, unexpected finds management, exclusion zone breaches (if any), ongoing site management measures and lessons learned.

Sequencing of heritage management actions

Sequencing of heritage management actions should ensure that no disturbance occurs until ACHMP measures are implemented.

Timing

The ACHMP must be finalised and approved prior to construction commencing, and redesign to avoid impacts should be undertaken during detailed design and reviewed by DPHI prior to works occurring.

Response

The requirement of an Aboriginal cultural heritage management plan is outlined in mitigation measure AH04 in *Chapter 9 (Management)* and in more detail in *Appendix E (Post approval requirements – updated guiding principles)* of *Appendix F (Aboriginal cultural heritage assessment addendum)* of the Amendment Report. The issues raised by FCNSW will be included in the ACHMP.

In addition, the ACHMP is now proposed to be developed in consultation with FCNSW, as well as other key stakeholders.

It is confirmed that compliance with the mitigation measures outlined in *Appendix D (Updated mitigation measures)* of the Amendment Report, including the development and implementation of the ACHMP, would not be the responsibility of FCNSW.

The components of the ACHMP as outlined in *Appendix E (Post approval requirements – updated guiding principles)* outline reporting requirements for any activities, and which would be submitted to DPHI and Heritage NSW when completed.

These reporting requirements would be further explored in the development of the ACHMP during detailed design of the project. While specific details of managing Aboriginal objects, sites and places would be developed in the ACHMP, *Appendix E (Post approval requirements – updated guiding principles)* provides various approaches and methodologies to explore, which includes details of managing sites to be avoided during the construction and operation of the project. The ACHMP would be developed and approved prior to construction.

AH02 has now been included to further explore avoidance of Aboriginal objects, sites and places prior to construction, and AH10 outlines processes for managing cultural materials following construction. Other mitigation measures, such as monitoring, would be developed in the proposed ACHMP in AH04.

8.13.4 Visitor amenity and public safety in State forests

Impact assessment approach

Summary of issue

FCNSW noted that the State forests (including Olney, Watagan, Corrabare and Ourimbah) affected by the project are heavily used for public recreation, with over one million visits per year. They host campgrounds, picnic areas, walking tracks, lookout points, and trails for four-wheel-driving and trail biking.

The EIS provides insufficient discussion of how prolonged construction activities and partial closures will impact these recreational uses and the local tourism economy. Potential impacts include: noise and dust affecting the amenity of camp sites, temporary closure of forest roads or areas restricting visitor access, safety risks from construction traffic mixing with public vehicles, and long-term visual changes at recreation sites (e.g. transmission lines visible from lookouts or picnic areas). FCNSW is concerned to ensure that forest visitors remain safe and that their experience is preserved as much as possible during the project. Any lost amenity should be mitigated or compensated for, and the public should be kept well informed of changes.

Response

The EIS acknowledges that the affected State forests are used for a range of recreational purposes including camping, walking, four-wheel driving and trail riding. These uses were considered in the assessment of:

- air quality impacts (refer to *Technical Report 18 – Air quality and greenhouse gas impact assessment* of the EIS and section 6.17 of the Amendment Report)
- noise and vibration impacts (refer to *Technical Report 8 – Noise and vibration impact assessment* of the EIS and *Appendix K (Noise and vibration impact assessment addendum)* of the Amendment Report)
- landscape character and visual impacts (refer to *Technical Report 3 – Landscape character and visual impact assessment* of the EIS and *Appendix G (Landscape character and visual impact assessment addendum)* of the Amendment Report)
- traffic and transport impacts (refer to *Technical Report 4 – Traffic and transport impact assessment* of the EIS and *Appendix H (Revised traffic and transport impact assessment)* of the Amendment Report)

- social impacts (refer to *Technical Report 6 – Social impact assessment* of the EIS and *Appendix I (Social impact assessment addendum)* of the Amendment Report)
- land use and property impacts (refer to the EIS and Amendment Report).

Additional recreational receivers within the State forests have also been incorporated into the assessment of air quality noise and vibration impacts as part of the Amendment Report. Refer to *Appendix K (Noise and vibration impact assessment addendum)* of the Amendment Report and the air quality impact assessment addendum in *section 6.17* of the Amendment Report for further details.

Standard management measures to minimise dust and amenity impacts during construction will be implemented through the construction air quality management plan (CAQMP). These measures are outlined in the *section 22.1.5* of the EIS and will include but not limited to:

- the deployment of a water cart or sprays to keep exposed areas and soil stockpiles moist, where necessary and practical
- limiting work during periods of adverse weather (hot, dry and windy conditions) and when dust is seen leaving the site
- applying water to stockpiles, covering stockpiles and/or storing materials in bunded areas, where practical
- covering potentially dusty vehicle loads entering and leaving the project impact area
- inspecting on-site access tracks for integrity and carrying out necessary repairs to the surface where necessary.

These measures will assist in maintaining public safety and minimising temporary reductions in visitor amenity through dust impacts during construction.

Recreational facilities have been considered in the air quality assessment, particularly within the Olney State Forest and the Watagan State Forest. Walkers Rest Area (campground) (ID 2250) and Casuarina Camping area (2465) were included as receptors in the assessment due to the proximity of construction activities for the transmission line and access tracks. The Olney Headquarters campsite has been identified as an additional sensitive receiver as it will now be within the 250 metres of access track upgrades. Other campground and general recreational areas were located outside of the required assessable area (i.e. more than 250 metres) and were not included as the risk of impacts would be negligible due to distance. The unmitigated and mitigated dust risks presented in *section 6.17.3* of the Amendment Report are consistent with the ratings outlined in the EIS for all project elements (i.e. there is no change); however, the applicable sensitive receivers have been updated in line with the approach to considering receivers within 250 metres from unpaved access tracks as well as proposed road upgrades along unpaved roads.

The EIS considered noise impacts on sensitive receivers (see *Chapter 16 (Noise and vibration)*) and *Technical Report 8 – Noise and vibration impact assessment* including passive recreation areas within the study area. *Appendix K (Noise and vibration impact assessment addendum)* of the Amendment Report assessed noise and vibration impacts of the amended project on sensitive receivers including passive and active recreation areas within the study area. Noise impacts during access tracks upgrades are anticipated with noise management level (NML) exceedances of up to and over 20 decibels are anticipated at sections of walking tracks including Great North Walk, Abbots Falls Walking Trail and Corrabare State Forest Loop. The Wishing Well Picnic Area, Flat Rock Lookout, Olney Headquarters, Old Mill Picnic Area and Casuarina Camping Area may also experience noise

impacts during access track upgrades of up to and over 20 decibels. Noise impacts with NML exceedances of up to 1-10 decibels are also anticipated during construction of the HTP corridor and stringing sites at Olney Headquarters, Old Mill Picnic Area and a Great North Walk. The predicted noise impacts represent a worst-case scenario and would be reduced with the implementation of mitigation measures in *Appendix K (Noise and vibration impact assessment addendum)* of the Amendment Report and *Appendix D (Updated mitigation measures)* of the Amendment Report.

The State forests, including the public recreation areas within the vicinity of the project have been included and assessed in *Technical Report 3 – Landscape character and visual impact assessment* and, where required, reassessed in *Appendix G (Landscape character and visual impact assessment addendum) (LCVIA)* of the Amendment Report. These recreation areas (campgrounds, picnic areas, walking tracks, lookout points) have been identified and included in the mapping at *Appendix J (Viewpoint assessment results summary plans)* of *Technical Report 3 – Landscape character and visual amenity*. This mapping confirms the location of the recreational areas assessed in relation to the project visual impacts.

As described in section 10.2 of the EIS and further detailed in *Technical Report 3 – Landscape character and visual impact assessment*, proximity and visibility to the project were assessed through field photography, magnitude assessment and photomontages. The assessment considered views from forestry roads, recreational areas and lookouts within State forests. Three representative viewpoints – viewpoint 10 (Flat Rock Lookout), viewpoint 11 (Olney Headquarters campground and picnic area) and viewpoint 12 (Watagan Forest Road) – were progressed to detailed visual assessment as access allowed accurate photography and modelling. The photomontages in *Technical Report 3 – Landscape character and visual impact assessment* demonstrate that, for all three viewpoints, the HTP corridor would be either not visible or mostly screened by distance, topography and surrounding vegetation, resulting in no to low visual impact during both construction and operation.

Viewpoint 11 was captured at the entrance to the Olney Headquarters campground where screening vegetation had been temporarily reduced. This represented a conservative view compared to what visitors would experience within the campground and nearby facilities, which are more heavily vegetated and would not have direct views of the project. Surrounding recreational sites east of Watagan Forest Road – including Old Mill, Casuarina, Turpentine and The Pines camping and picnic areas – are similarly enclosed by forest vegetation and would not have visibility of the transmission line.

More broadly, recreational areas across Olney, Watagan, Corrabare and Ourimbah State Forests fall within the Managed Forestry landscape character zone (LCZ 12). *Appendix G (Landscape character and visual impact assessment addendum)* of the Amendment Report found that visual impacts within LCZ 12 are consistent with the EIS. No new recreational viewpoints were identified as requiring reassessment, and no additional visual impacts were identified for recreation sites.

Mitigation measures relevant to managing visual impacts on public recreation areas are outlined in section 10.5.2 of the EIS and include minimising vegetation removal (MM LV1), managing construction lighting in accordance with AS 4282 (MM LV2), and providing screening and landscape treatments where appropriate (MM LV3 and MM LV4).

Accordingly, the project is expected to result in low visual impact on recreational amenity across State forests during both construction and operation. EnergyCo will continue to work with FCNSW to ensure that visitor information and wayfinding materials communicate any temporary changes to access during construction to maintain visitor safety and amenity.

Specific traffic control measures for access tracks in State forests to manage and coordinate HTP construction with ongoing forestry operations and to manage potential conflicts with recreational users would be agreed with FCNSW. This will be detailed within the TMP, consultation with FCNSW (refer to section 8.13.5 of this Submissions Report and *Appendix D (Updated mitigation measures)* of the Amendment Report for further details).

Technical Report 6 – Social impact assessment of the EIS assessed potential social impacts related to impacts on the recreational uses within State forests and the local tourism economy from construction of the project in:

- *section 6.4.4 (Changed access to recreational infrastructure due to road network changes)*, which concluded that unmitigated, the social impact of diminished recreational access is rated as high (negative) for campers & visitors, NSW / ACT 4WD Association, Local 4WD clubs, Trail biking clubs, Forest permit holders and Nature based recreation operators in the local and corridor localities, and low (negative) for the regional social locality. This impact would be reduced to medium (negative) for stakeholders in the corridor and local social localities and low for other users with mitigation
- *section 6.5.6 (Impacts on tourism economy and visitor economy)*, which acknowledged that increased construction noise, visual disturbances, road detours and congestion may deter visitors from engaging in wine tourism, eco-tourism, and cultural heritage experiences. The pre-mitigated impact rating for impacts on the tourism economy was assessed as low (negative) within the corridor social locality, and medium (negative) in terms of interactions with tourism operators in surrounding local social localities.

These impacts would be managed through the social impact management plan, community communication strategy and various mitigation measures for visual, traffic and noise impacts refer to *Appendix D (Updated mitigation measures)* of the Amendment Report. The community communication strategy would require engagement with tourism and recreation operators to manage associated impacts during construction, and community notification processes developed in consultation with FCNSW and councils.

Management and mitigation

Summary of issue

Recreation and public safety management plan

FCNSW recommended that, prior to construction, the proponent be required to develop a recreation and public safety management plan in consultation with FCNSW, local councils and recreational user groups (such as 4WD NSW and ACT and Forest Permit holders), to be approved by DPHI. This plan should detail how public use of the relevant State forests will be managed to ensure safety and minimise disruption. Key requirements should include:

- public communication: Advance notice to the public of any track or area closures via on-site signage at both the State forest entrance and in the vicinity of the closure/proposed works,

online updates (e.g. via adequate notice for inclusion on FCNSW's website and social media), and direct communication with recreational user groups (4WD clubs, event organisers, etc.). The Plan should establish a system for real time updates on access (such as a project webpage or hotline) so visitors can plan around construction zones

- maintaining access or providing alternatives: Strategies to keep popular recreation areas open where possible. If closures are necessary, they should be limited in duration and scope. For example, if a campground must close for nearby line stringing, the Plan might arrange for an alternate nearby campground to be available or improved as a temporary replacement. The Plan should list all formal recreation sites and trails in the project area and indicate whether they will be unaffected, partially closed, or fully closed, along with timings and alternatives
- safety measures: Measures to separate or control construction traffic on roads that are also used by the public. This could include traffic control at key junctions, reduced speed limits on forest roads during work periods, restricted public access to active work sites, and clear signage like "Trucks Operating" warnings. If blasting or other hazardous activities are planned near accessible areas, the Plan must include exclusion protocols and siren warnings, etc
- amenity impact mitigation: Actions to reduce noise, dust or visual intrusion at recreational sites. For instance, scheduling particularly noisy works (rock breaking, helicopter lifts) outside of weekends or holiday periods when campgrounds are busiest; or outside organised activities for which Forest Permits have been issued; using water carts on roads near campgrounds to suppress dust; and maintaining a vegetated buffer as much as possible between works and adjacent picnic areas and network roads to reduce visual impact
- rehabilitation and enhancement: A commitment that any disturbance to recreation sites (e.g. if a picnic area is used temporarily for equipment laydown) will be fully rehabilitated to the satisfaction of FCNSW, or even improved post-construction. The Plan should also consider enhancement measures, such as the Proponent funding new or upgraded facilities (walking track improvements, picnic shelters, viewing platforms and wedding arbours) in other forest areas as compensation for the temporary loss of amenity. Such improvements, if agreed with FCNSW, would be delivered before or shortly after the project completion to ensure the community sees a benefit.

Scheduling of works in high use visitor areas

FCNSW recommended a condition should require scheduling construction works to minimise conflicts with peak public usage of State forests. In particular, construction activities that impede access to major recreation nodes or generate high noise levels should be avoided during weekends, public holidays, and NSW school holiday periods, to the greatest extent practicable. If critical works must occur in those times (for reasons of continuous construction sequence or weather windows), the Proponent should implement additional measures to mitigate impacts (such as providing temporary alternative facilities, increasing communication, or in exceptional cases, compensating organised events that are disrupted). This scheduling requirement would ensure that forest user impacts are reduced and demonstrates consideration for the community.

Restoration of access and facilities

FCNSW recommended that conditions require the Proponent to restore all affected forest roads, tracks and visitor facilities to at least their pre-project condition immediately following construction. Temporary infrastructure such as gates or detours should be removed unless otherwise agreed. This

includes repairing any wear on access roads heavily used by construction vehicles that are also important for visitor access (e.g. Watagan Forest Road) and reopening any closed areas as soon as they are safe. A post-construction inspection with FCNSW should confirm that recreation sites and access routes are handed back in a condition not inferior to that prior to the project.

Monitoring and response

FCNSW recommended that the Proponent maintain a public complaints register during construction to record complaints and safety incidents relating to forest visitors. Records should be regularly reported to DPHI and FCNSW. Where recurring issues are identified – such as persistent dust complaints at a particular campground – the Proponent should review mitigation measures at that location and implement additional controls promptly. FCNSW noted this would establish a feedback loop where public concerns translate into corrective action.

Timing

FCNSW recommended that the recreation and public safety management plan be finalised prior to construction, with communication and access management measures commencing as soon as works begin and continuing throughout construction. Scheduling considerations should apply across the project timeline to avoid peak recreational use. Restoration of recreational access should occur as soon as construction is completed within each area or stage, with all recreational sites fully reinstated prior to the operational phase.

Response

Mitigation measures have been proposed that address several matters suggested for inclusion in the recreation and public safety management plan. These include (refer to *Appendix D (Updated mitigation measures)* of the Amendment Report):

- public communication: Community communication strategy, which will set out a framework to develop a community notification process in consultation with FCNSW and councils during construction
- maintaining access or providing alternatives: A traffic management plan and ongoing engagement with FCNSW to develop and review measures to maintain pedestrian and cyclist access for walking and biking trails in the State forest, noting that temporary alternative access arrangements will be provided following consultation with affected stakeholders and the relevant roads authority
- safety measures: The traffic management plan will include various safety measures, including site-specific traffic control measures (including signage) to manage and regulate traffic movement, prepared in consultation with the relevant road authorities and implemented by licensed traffic management contractors
- amenity impact mitigation: To minimise impacts to State forests and State forest operations (including recreational uses), the Forestry Corporation of NSW will be consulted on construction methodologies and activities as part of continued design development, and before and during construction activities
- rehabilitation and enhancement: The process for rehabilitation and stabilisation of disturbed areas following completion of construction would be managed through property management plans that will be developed for directly impacted properties. Prior to the completion of construction, temporary areas used to support the construction of the project would be

decommissioned (with temporary infrastructure removed) and rehabilitated. Pre-condition assessments of the construction impact area would be undertaken to determine the existing condition of assets, infrastructure, utilities, and the general condition of the land. Rehabilitation of vegetated areas would also be undertaken in accordance with a biodiversity management plan (BMP) for the HTP.

EnergyCo will continue to engage with FCNSW throughout the HTP project's planning and construction phases, including in relation to scheduling of works and recreational access.

EnergyCo acknowledges the importance of maintaining public complaints register for State forest users and any other stakeholder potentially impacted by the HTP project. *Technical Report 6 – Social impact assessment* identifies mitigation measures, including the S02 Community Communication Strategy, which will outline a framework for developing a community notification process in consultation with FCNSW and councils during construction. This also includes the establishment of a feedback mechanism by which the community can discuss or provide feedback to the proponent, including how the proponent will respond to enquiries or feedback from the community, as well as targeted communications regarding visual, noise, and air quality impacts, road changes/closures, and emergency access coordination — ensuring timely notification ahead of disruptions (see also mitigation measures LV1–LV3, NV1, AQ1–AQ3, and TT1 in *Appendix D (Updated mitigation measures)* of the Amendment Report).

As per mitigation measure S03, a complaints management system will also be maintained throughout the construction period and for a minimum of 12 months after the construction is completed. The complaints management system will include the following (at a minimum):

- contact details for a 24-hour response line and email address for ongoing stakeholder contact throughout the project
- details of all complaints received will be recorded
- verbal and written responses describing what action will be taken will be provided to the complainant (or as otherwise agreed by the complainant).

As per mitigation measure S01 (refer to *Appendix D (Updated mitigation measures)* of the Amendment Report), the social impact management plan and related plans will outline a program to monitor, evaluate and publicly report on the effectiveness of the mitigation measures. Monitoring outcomes will be shared with stakeholder forums as relevant during construction. The social impact management plan will be reviewed annually and updated based on monitoring data and community and stakeholder feedback.

8.13.5 Traffic, haulage and road infrastructure

Construction of the project would require frequent heavy vehicle use of State forest roads, including unsealed logging roads and trails, to access transmission tower sites. FCNSW raised concerns about potential damage to road surfaces, interactions between project traffic and ongoing forestry haulage or public users on narrow roads, and whether existing bridges and culverts can safely accommodate oversize equipment. FCNSW seeks assurance that any required upgrades would be identified, that roads would be maintained and restored for the duration of construction, and that haulage schedules would be coordinated to avoid safety risks.

Management and mitigation

Summary of issue

Traffic and access management plan

FCNSW recommended that, prior to commencement of construction, the proponent prepare a traffic and access management plan for all State forest roads and tracks, in consultation with FCNSW, NPWS and relevant local councils, to the satisfaction of DPHI. The plan should address:

- identification of forest road segments requiring upgrading or strengthening before use by project vehicles (for example adding gravel to soft sections, widening tight corners or reinforcing bridges or culverts for heavy loads), with upgrades completed prior to HTP construction, in agreement with FCNSW
- protocols for managing two-way traffic on one-lane roads, such as temporary passing bays, radio communication for convoys and stationing traffic controllers at critical points during peak movements, as well as signage, speed limits and other controls for interfacing with public traffic
- mechanisms to coordinate HTP traffic with FCNSW's ongoing timber haulage operations, including regular communication (daily or weekly) to share schedules and requirements for heavy vehicle movements to avoid known peak haulage times on shared roads, or managed convoys or right-of-way rules if simultaneous use is unavoidable
- procedures to ensure emergency vehicles (such as RFS and FCNSW fire trucks and ambulances) can always access forest areas, including rapid reopening of temporarily closed roads or provision of suitable alternative routes during works such as line stringing
- requirements that all project drivers undergo inductions covering forest road conditions and safety, adhere to posted speed limits (which may be lower than normal due to recreation presence or road condition) and yield appropriately to other forest users, with corrective action (such as removal from the project after repeated warnings) if unsafe driving occurs.

Road maintenance and restoration

FCNSW recommended that conditions require the proponent to maintain and restore State forest roads used by the project:

- during construction, the proponent must keep these roads safe and serviceable, performing maintenance such as grading, resurfacing or dust suppression as needed due to project traffic. For example, continuous heavy truck use may quickly degrade gravel roads and require more frequent grading and gravelling to prevent unsafe conditions
- immediately following construction, the proponent must restore any damage to State forest roads or tracks caused by the project to at least pre-project condition. A joint post-construction road survey with FCNSW must identify remediation requirements, and restoration works such as filling potholes, re-grading surfaces, repairing drainage and replacing damaged signage or gates should be completed before or as part of demobilisation.

To ensure compliance, the department may require the proponent to lodge a road maintenance bond or security before construction.

Road use agreement

FCNSW recommended that, before heavy vehicle works commence on State forest roads, the proponent be required to enter into formal Road Use and Maintenance Agreements with FCNSW (and other relevant road owners). These agreements would set out responsibilities for road upgrades, maintenance actions, repair timeframes and recovery of costs associated with extraordinary road wear, providing a legally enforceable mechanism outside consent conditions.

Operational phase road maintenance

Conditions should also extend into the operational phase of the transmission line. The proponent (or TransGrid as the future asset owner) would be responsible for maintaining any ongoing access tracks in a safe condition, repairing any damage caused by maintenance vehicles (such as in wet-weather access). A long-term access protocol or licence with FCNSW should define maintenance expectations, ensuring a “leave no trace” outcome on forest roads over both the short and long term.

Timing

Timing requirements specify that the traffic and access management plan must be approved before construction traffic uses forest roads, with any required upgrades completed beforehand. Road Use Agreements should be executed prior to substantial works commencing, maintenance obligations will apply continuously through construction, and post-construction restoration should be completed within weeks of works finishing in each area. A long-term operational maintenance protocol must be in place when the line is commissioned.

Response

Traffic management plan

A traffic management plan (TMP) will be prepared prior to construction as part of the project’s construction environmental management plan (CEMP). The TMP will be developed in consultation with the relevant road and rail authorities, including Transport for NSW, local councils, ARTC and where relevant FCNSW. The TMP will confirm construction routes and set out driver safety requirements including a code of conduct, fatigue management, and rest area locations (refer to *Appendix D (Updated mitigation measures)* of the Amendment Report).

Specific traffic control measures for access tracks in State forests will be implemented to manage and coordinate HTP construction with ongoing forestry operations and to manage potential conflicts with recreational users. The measures would be agreed with FCNSW and NPWS, and detailed within the TMP, if agreed by FCNSW. It is expected that this would also address strategies that would be implemented in the event of an emergency.

Road maintenance and restoration

The obligation for the maintenance and restoration State forest roads used by the project is addressed in *Technical Report 4 – Traffic and transport impact assessment* (see section 5.3.7). For specific matters such as dust management, details on the on the management strategies can be found within the relevant technical reports, for example *Technical Report 18 – Air quality and greenhouse gas*. During construction, where rectification works are required due to project impacts, consultation with the appropriate road authority will be undertaken to confirm the scope of the work

required (see section 5, 6 and 8.1 of *Technical Report 4 – Traffic and transport impact assessment* and mitigation measure TT1 of *Appendix D (Updated mitigation measures)* of the Amendment Report). Routine inspections and required maintenance of construction routes will be carried out to ensure that roads remain safe for all users throughout the construction period.

Road use agreement

EnergyCo acknowledged the need for access track upgrades to facilitate the project which is detailed section 5.2.9 of *Technical Report 4 – Traffic and transport impact assessment*. The requirement to enter into agreements with FCNSW and other relevant road owners prior to the commencement of heavy vehicle use is considered in *Technical Report 4 – Traffic and transport impact assessment*. *Technical Report 4 – Traffic and transport impact assessment* recognises the importance of detailing obligations for access tracks upgrades, ongoing maintenance, repair timeframes, and cost recovery for wear, particularly where project activities may impact shared or sensitive road infrastructure. These obligations would be detailed and managed in an agreement between FCNSW and EnergyCo and the deed of easement between FCNSW and the network operator.

Operational phase road maintenance

Post construction, the maintenance of majority of State forest roads will be returned to FCNSW for management and maintenance, in accordance with current arrangements. Where an access track has been newly created by the project and is directly required for transmission line tower access or switching station access, this will be maintained in accordance with the future network operator's operational requirements.

Timing

The TMP will be prepared and approved prior to construction as part of the project's environmental management strategy. Road dilapidation surveys and routine inspections will be completed along all nominated construction routes on local roads prior to construction.

8.13.6 Soils, water and erosion control

Management and mitigation

Summary of issue

FCNSW raised concern that the project crosses steep, erosion-prone terrain with multiple creeks and drainage lines in State forests. If vegetation clearing and earthworks are not rigorously managed, there is a high risk of soil erosion, sediment-laden runoff, gullying, landslips, and long-term soil degradation. The EIS acknowledges this but defers controls to a future soil and water management plan without sufficient detail. FCNSW also highlighted the potential for sediment to contaminate downstream waterways, affecting aquatic habitat and other water users, and noted that accidental release of fuels, chemicals or legacy contaminants (e.g. old cattle dips) could pollute the environment.

Soil and water management plan

FCNSW recommended that the proponent prepare a detailed soil and water management plan (SWMP) prior to construction, in consultation with FCNSW and to the satisfaction of DPHI. The plan should be consistent with the avoid-mitigate-offset hierarchy, such as avoiding clearing in wet conditions, mitigating impacts with appropriate controls, and offsetting any residual water impacts if needed. The SWMP should require:

- site-specific erosion and sediment control plans (ESCPs) for all high-risk work areas including steep slopes, water crossings and erodible soils. These plans should be developed by a certified expert and specify exact erosion and sediment controls such as contour banks, diversion drains, silt fences, sediment basins and slope stabilisation methods including matting and mulching. ESCPs must comply with RFS guidelines and forestry soil conservation codes
- no works without controls in place, meaning land disturbance must not commence on a given construction front until prescribed erosion and sediment controls are installed and functional. For example, if constructing an access track up a slope, cross-drains and catch drains should be installed concurrently, not afterwards. An environmental or soil specialist should inspect and sign off on controls before major earthworks continue
- creek crossing design criteria to ensure temporary or permanent watercourse crossings allow fish passage and do not obstruct flows. This may involve temporary bridges or culverts, which should be removed if not needed after construction. The plan should reference relevant fisheries guidelines and limit riparian vegetation clearing to the minimum necessary width
- progressive rehabilitation of disturbed areas so that, once a portion of work is completed (such as construction of a tower foundation), surrounding ground is stabilised through regrading to natural contours, application of topsoil and seeding or mulching. The plan should schedule progressive revegetation using a mix of local native plants or grasses
- stockpile and runoff management rules including placement of soil stockpiles away from drainage lines, use of sediment fencing or covers, and directing dirty runoff water to sediment traps rather than allowing uncontrolled discharge across construction sites.

Water quality monitoring

FCNSW recommended that water quality monitoring be mandated within the SWMP. Baseline samples should be taken prior to works in representative waterways. During construction, regular downstream monitoring should occur – particularly after rainfall events – to detect elevated turbidity or suspended sediments. Where trigger levels are exceeded, the Proponent should immediately strengthen erosion controls or suspend works until resolved. Monitoring results should be provided to DPHI and FCNSW, and incident response protocols must be in place for any significant pollution event, including EPA notification where required.

Contingency for contamination finds

FCNSW recommended that conditions require works to cease immediately if contaminated soils or materials are encountered during construction, such as hydrocarbon odour, asbestos fragments or historical dumpsite material. A qualified contaminated land specialist should investigate the extent of contamination, and any affected material must be managed and disposed of in accordance with NSW EPA guidelines, including removal to a licensed waste facility if necessary. Validation sampling should confirm satisfactory remediation before works recommence at that location. FCNSW noted

that an unexpected contamination finds protocol should be included in the soil and water management plan and construction environmental management plan so all crews are aware of reporting and response requirements.

Compliance and expertise

FCNSW recommended that an experienced soil conservation or environmental officer be present or on-call during critical stages of earthworks in State forests. This role could be fulfilled by the project's environmental representative or a specialist sub-consultant. The officer should have authority to direct crews to implement or improve erosion and sediment control measures if deficiencies are observed in the field. FCNSW also suggested that independent audits be undertaken after the first wet season to ensure controls are functioning effectively and compliance is maintained.

Timing

FCNSW advised that the SWMP and associated ESCPs be approved before any clearing or ground disturbance commences. Erosion and sediment controls must be installed prior to works and maintained throughout construction. Water quality monitoring should begin pre-construction to establish baselines and continue during works at defined intervals, with immediate reporting of exceedances. Progressive rehabilitation should be undertaken concurrently with construction, with all disturbed areas stabilised by the completion of works in each stage – and no later than project finalisation.

Response

The potential impacts of the project on soils, water, and erosion control including the risk of sediment-laden runoff, gullyng, landslips, and long-term soil degradation in steep and erosion-prone terrain has been assessed in detail in *Technical Report 9 – Soils and land impact assessment* and *Technical Report 10 – Surface water impact assessment* of the EIS.

Soil and water management plan

A project-specific soil and water management plan (SWMP) will be developed prior to construction as part of the CEMP (mitigation measure SW1, *Appendix D (Updated mitigation measures)* of the Amendment Report). The SWMP will identify foreseeable risks relating to soil erosion and water pollution during construction and describe how these risks will be managed. The plan will include site-specific ESCPs for all disturbance activities, developed and implemented in consultation with a Certified Professional in erosion and sediment control. ESCPs will address high-risk areas such as steep slopes, water crossings, and erodible soils, and will be prepared in accordance with best practice guidelines, including *Managing Urban Stormwater: Soils and Construction* (Landcom 2004) and the *IECA Best Practice Erosion and Sediment Control manual* (see *Technical Report 10 – Surface water impact assessment*, mitigation measure SW3, *Appendix D (Updated mitigation measures)* of the Amendment Report). An ESCP has been developed for the amended project to provide more detail on the proposed erosion and sediment measures that would be implemented (provided in *Appendix Q of Appendix E (Revised biodiversity development assessment report)* of the Amendment Report).

The SWMP will require that no works commence without erosion and sediment controls in place, and that controls are maintained throughout construction, as detailed in *Appendix D (Updated mitigation measures)* of the Amendment Report.

Creek crossing design will be in accordance with applicable standards and ensure that temporary or permanent watercourse crossings allow for fish passage and do not obstruct flows, in accordance with relevant fisheries and watercourse crossing guidelines (mitigation measure SW2, *Appendix D (Updated mitigation measures)* of the Amendment Report). Riparian vegetation clearing will be minimised, and progressive rehabilitation of disturbed areas will be undertaken, with ground stabilisation and revegetation using local native species as soon as practicable after works are completed (mitigation measures SW11, SW12, *Appendix D (Updated mitigation measures)* of the Amendment Report). Further avoidance of important habitats for amphibian species has been incorporated in the amended disturbance area in the Olney State forest. Mitigation measure B4 has been updated further reflect this commitment to avoiding or minimising impact to amphibian breeding habitats and along waterways.

Stockpile and runoff management will be addressed by locating soil stockpiles away from drainage lines, using sediment fencing or covers, and directing runoff to sediment traps (mitigation measure SW8, *Appendix D (Updated mitigation measures)* of the Amendment Report).

Water quality monitoring

A water quality monitoring program will be implemented as part of the SWMP, with baseline sampling prior to works and regular downstream monitoring during construction, particularly after rainfall events. Monitoring locations will be positioned upstream and downstream of disturbance areas, focusing on sensitive receiving environments. Where trigger levels are exceeded, erosion controls will be reviewed and strengthened or works suspended until resolved. Incident response protocols will be in place for any significant pollution event, including EPA notification where required (mitigation measure SW4, *Appendix D (Updated mitigation measures)* of the Amendment Report).

Contingency for contamination finds

Contingency protocols for contamination find will be included in the construction environmental management plan. Works will cease immediately if contaminated soils or materials are encountered, and a qualified contaminated land specialist will investigate and manage any affected material in accordance with NSW EPA guidelines. Validation sampling will confirm satisfactory remediation before works recommence. The full unexpected finds procedure can be found in *Technical Report 11 – Contamination preliminary site investigations*, specifically mitigation measure C7 and *Appendix C (Unexpected finds procedure)*.

Compliance and expertise

An experienced soil conservation or environmental officer will be present or on-call during critical stages of earthworks in State forests, with authority to direct crews to implement or improve erosion and sediment controls if deficiencies are observed. Independent audits may be undertaken after the first wet season to ensure controls are functioning effectively and compliance is maintained (mitigation measure SW3, *Appendix D (Updated mitigation measures)* of the Amendment Report).

Timing

The SWMP and associated ESCPs will be approved before any clearing or ground disturbance commences. Erosion and sediment controls must be installed prior to works and maintained throughout construction. Water quality monitoring will begin pre-construction to establish baselines and continue during works at defined intervals, with immediate reporting of exceedances. Progressive rehabilitation will be undertaken concurrently with construction, with all disturbed areas stabilised by the completion of works in each stage and no later than project finalisation (mitigation measures SW1–SW12, *Appendix D (Updated mitigation measures)* of the Amendment Report).

8.13.7 Loss of productive forestry land and biosecurity

Management and mitigation

Summary of issue

FCNSW notes that the project will permanently alienate areas of State forest from timber production, resulting in the loss of renewable resource capacity and future revenue for the State and regional communities. Although the affected area is comparatively small, it contains quality hardwood stands that would otherwise contribute to sustainable yield. FCNSW considers that the EIS does not propose compensation for this loss and expects that the project should result in no net reduction to the State's productive forest estate. FCNSW also raises biosecurity risks associated with increased vehicle movements and soil disturbance, including the potential introduction or spread of weeds (e.g. lantana, blackberry), pest fauna (e.g. feral pigs, deer), and pathogens (e.g. Phytophthora root rot, Myrtle Rust). FCNSW considers the EIS measures to be limited and seeks commitments to proactive biosecurity management and replacement of lost productive capacity.

Compensatory plantation/forest land

FCNSW recommends the following matters addressed:

- Conditions of Approval should require compensatory plantation or forest land to offset permanent loss of State forest resource, achieved either through dedication of equivalent productive land to the State forest estate or by funding new timber plantations on land identified by FCNSW
- compensatory arrangements should be secured prior to HTP operation and demonstrate at least equivalent productive capacity, including funding for plantation establishment and long-term investment so communities dependent on forestry are not disadvantaged
- the project's impacts on sustainable timber supply should be acknowledged in approval documentation, with a requirement for the proponent to work collaboratively with FCNSW to avoid disruption to forestry operations (e.g. scheduling works, funding timber haulage delay costs or covering impacts where forest roads are temporarily closed). Where operational scheduling adjustments are required, additional associated costs should be borne by the proponent under commercial arrangement

Biosecurity management plan, compliance and remediation

A biosecurity management plan should be prepared prior to construction, in consultation with FCNSW, detailing measures to avoid introduction or spread of weeds, pests and diseases, aligned with a prevention-first (avoid-mitigate-offset) hierarchy. Plan should include:

- vehicle and equipment hygiene protocols (including washdown procedures, inspection logs and disinfectant procedures when moving from areas known to have pest infestations or Phytophthora)
- baseline surveys should identify existing weed presence along the corridor, with ongoing inspection of disturbed areas and rapid treatment of new incursions using appropriate herbicides or removal techniques. Priority weed species may include Chilean Needle Grass, Fireweed and Lantana, with continued weed control committed through construction and operation until eradicated.
- pathogen control should restrict movement of soil and fill from known infected regions, require pathogen-free material and consider controls such as footbaths or tyre washes in high-risk areas, while scheduling works to avoid spore-heavy periods
- open clearings may increase populations of pest fauna (e.g. deer, rabbits) or facilitate predator movement (e.g. wild dogs); FCNSW may request targeted pest animal control where population surges are observed. The proponent should be required to support pest control actions in coordination with FCNSW programs where construction activities increase pest pressures.
- approval conditions should require the proponent to remediate any biosecurity impacts caused by the project, including weed infestations or pathogen outbreaks traced to project activity; remediation should be required during construction and include a post-construction monitoring period of at least 24 months, with extension if issues persist
- compensatory land or plantation strategy should be agreed in principle prior to construction to ensure certainty of delivery, with full implementation by the time the transmission line becomes operational. The biosecurity management plan must be approved before on-ground works commence, and all preventative measures (such as washdown procedures, etc.) must be in place from first site entry
- Annual biosecurity reporting to DPHI and FCNSW should continue through construction and operation, addressing weeds, pests, diseases, and efficacy of implemented controls.

Timing

The compensatory land or plantation strategy should be agreed in principle before construction begins (so that there is certainty it will occur), with final implementation by the time the project becomes operational. The biosecurity management plan needs to be in place and approved prior to on-ground works, and all preventative measures (vehicle washdowns, etc) start from day one of site entry. Monitoring for weeds/pests should continue through construction and operation, with annual reporting to DPHI/FCNSW on biosecurity outcomes.

Response

Compensatory plantation/forest land

EnergyCo acknowledges loss of State forest resource including sustainable plantation timber as a result of permanent infrastructure required for the HTP including only the transmission line easement, new access tracks and the Olney switching station. Impacts to State forest land, plantation forests and state forest land displacement were assessed in *Chapter 12 (Land use and property)* and the assessment of economic impacts in *Chapter 22 (Other matters)* of the EIS.

As noted, in *section 5.19.3* of the Amendment Report, construction of the project would impact 688 hectares of production native forests and 43 hectares of plantation forests which would represent an impact on gross forestry production is estimated to be around \$35,552 per year of construction. Operation of the HTP would represent an impact on gross forestry of around \$23,387 per year of operation (in terms of foregone revenue ignoring salvage value of cleared timber).

A third party agreement is being negotiated between EnergyCo and FCNSW for the construction of the HTP within the State Forest areas to address responsibilities of both parties to work collaboratively to avoid/minimise disruptions to forestry operations (including clearing of timber resources) and associated compensatory measures as appropriate. An easement agreement will be negotiated with FCNSW which will outline the rights and responsibilities of FCNSW and the network operator for the ongoing use of the land. The easement agreement will include methods of compensation for the loss of existing timber plantations and the loss of State forest resource for future timber plantation. Compensatory arrangements will be secured prior to the HTP's operation.

EnergyCo is committed to working collaboratively with FCNSW to avoid disruption to forestry operations. The development of a construction environmental management plan for construction of the HTP will manage the sequencing of construction activities and construction traffic to minimise impacts to Forestry operations to the greatest extent practicable. More detail on environmental management and traffic management measures in relation to forestry operations is provided in *section 8.13.8* and *section 8.13.5* of this Submission Report respectively.

Biosecurity management plan, compliance, and remediation

EnergyCo acknowledges FCNSW concerns regarding biosecurity management during the construction and operational phases of the EIS. Biosecurity risks associated with the movement of construction vehicles, earthwork, and routine maintenance activities during construction and operation of the HTP are detailed in *section 13.3.5* and *section 13.4.4* of the EIS, respectively. Mitigation measure AG3 involves the preparation of biosecurity management plan in consultation with affected landowners and relevant stakeholders (including FCNSW) (refer to *Appendix D (Updated mitigation measures)* of the Amendment Report). At a minimum the biosecurity management plan will developed and implemented during construction, and will include:

- weed management controls, including inspection and cleaning of vehicles, plant and equipment, and management of earthworks and clearing activities
- development of specific controls where high biosecurity risks are identified
- specific controls applicable to properties in consultation with landowners, which will be consistent with existing biosecurity plans where they are in place
- a monitoring program to track the effectiveness of the controls identified in the biosecurity management plan

- a monitoring program to track the effectiveness of the controls identified in the biosecurity management plan.

The biosecurity management plan will address specific biodiversity risks raised by the FCNSW including:

- biosecurity protocols in areas where *Phytophthora* and Myrtle Rust are known to occur
- baseline surveys to identify existing weed presence along the corridor
- protocols for the management of priority weed species including Chilean Needle Grass, Fireweed and Lantana
- pathogen control and management (i.e. *Phytophthora*)
- adaptive management including remediation measures to address biosecurity impacts caused by the project
- pest control actions in coordination with NSW Forestry Corporation programs where construction activities increase pest pressures.

Operational biosecurity protocols and procedures captured under the network operator's environmental management system would be implemented along the transmission line easement, at substations and switching stations, and along access tracks during operation (refer to mitigation measure AG4 in *Appendix D (Updated mitigation measures)* of the Amendment Report). The network operator will consult with FCNSW during the development on operational biosecurity protocols and procedures.

8.13.8 Environmental management, compliance and reporting

Many important safeguards for environmental and community issues are to be implemented via management plans and commitments outlined in the EIS. FCNSW wants to ensure these are delivered and effective. There is a risk that without strict oversight, some measures could be downscaled or overlooked during the long construction process. Additionally, given the complexity of the project, an adaptive management approach is needed to respond to any unforeseen impacts. The EIS also defers numerous details to post-approval plans, so clear conditions on preparing and approving those plans are necessary. FCNSW, as a land manager, seeks ongoing involvement in the project's implementation to ensure that State forest interests are protected.

Summary of issue

Preparation and approval of management plans

FCNSW recommended that conditions require the preparation of a suite of environmental management plans, including vegetation and bushfire management, biodiversity, heritage, recreation, traffic, soil and water, and biosecurity. These plans should be prepared in consultation with FCNSW where relevant to State forest matters, approved by the regulator before associated works commence, and implemented strictly in accordance with approved measures. FCNSW noted that commencement of relevant works should be prevented until approvals are granted.

Independent environmental representative

FCNSW requested the appointment of an independent environmental representative (IER) engaged at the Proponent's cost and approved by the regulator. The representative would monitor compliance with conditions and plans, conduct site inspections, attend stakeholder meetings and provide monthly reports. They should also be authorised to direct corrective actions and stop works in the event of a significant environmental breach until rectified.

Compliance auditing

In addition to continuous IER oversight, FCNSW recommended periodic independent compliance audits, such as six months after construction begins, annually during construction and one year into operation. These audits should assess adherence to approval conditions and the effectiveness of mitigation measures. Audit reports should be provided to the regulator and made available to FCNSW, with non-compliances addressed promptly and subject to enforcement if required.

Ongoing consultation and Review

FCNSW sought ongoing consultation throughout construction, such as quarterly liaison meetings to discuss works in State forests, progress on management actions and emerging issues. Prior to any significant change in construction method, or any modification to the approval affecting State forest land, FCNSW should be consulted to ensure risks are understood and managed.

Adaptive management conditions

FCNSW recommended including a broad adaptive management condition. If monitoring shows that mitigation is not achieving desired outcomes or causing unintended impacts, the Proponent would be required to implement additional or modified measures subject to DPHI approval. This allows management to respond to real-world performance rather than relying solely on pre-construction assumptions.

Reporting and handover

At completion of construction, FCNSW requested a final environmental completion report documenting compliance, rehabilitation outcomes, offsets delivery, non-compliances and ongoing commitments. Where responsibilities continue beyond construction, such as regeneration monitoring or maintenance, FCNSW recommended formal handover arrangements, potentially including financial security or contract mechanisms, to ensure obligations are met on State forest land.

Timing

FCNSW noted that the recommended compliance measures would apply across different phases of the project. Management plans should be approved before relevant works commence, and an independent environmental representative should be appointed from the start of construction. Independent audits should occur at defined intervals, and consultation with FCNSW should continue throughout construction and early operation. Adaptive management would apply whenever monitoring identifies an issue, and a final environmental report should be prepared at the completion of construction.

Response

As outlined in *Chapter 24 (Environmental management)* of the EIS and revised in *Chapter 6 (Environmental management)* of the Amendment Report, the approach to environmental management for the project will be consistent with:

- the objective of avoiding and minimising impacts throughout all stages of the project
- the relevant Conditions of Approval for the project (if approved)
- mitigation measures and management plans proposed for the project (refer to *Appendix D (Updated mitigation measures)* of the Amendment Report)
- the construction environmental management plans (CEMPs) (for construction) and environmental management system (for pre-construction and operation) to be implemented for the HTP.

Issue-specific environmental management sub plans will be developed and implemented during construction of the HTP. These include (but are not limited to) biodiversity, biosecurity, heritage, traffic, social, and soil and water environmental management plans plus a bushfire emergency management and evacuation plan, as discussed in *section 24.3.2* of the EIS and updated in *Chapter 6* of the Amendment Report.

The issue-specific environmental management sub plans will be prepared in accordance with the mitigation measures and commitments detailed in the EIS and the Conditions of Approval (both State and Australian Government) for the HTP.

In addition to the above requirements, the issue-specific environmental management plans will be developed to be consistent with applicable policies/standards/guidelines and in consultation with relevant stakeholders (as applicable), including FCNSW.

The content of the issue-specific environmental management plans will follow the same basic structure as that outlined in *Table 24.1* of the EIS. This will include community and stakeholder engagement (including how the community and other stakeholders will be informed about the project status and environmental performance) and an environmental management framework (including legal and compliance requirements, environmental management measures, monitoring, inspections, compliance monitoring and reporting, auditing, environmental incident and emergency planning, preparedness and response, corrective and preventative actions, and review and revision requirements, among others).

The CEMP must be approved by DPHI prior to construction of the HTP.

It is likely that an Independent Environmental Representative (IER) will be a requirement of the Conditions of Approval of the HTP. The IER will need to be approved by the Secretary of DPHI.

In addition, the design and construct contractor(s) will be required to appoint an Environmental Manager responsible for ensuring that the project is delivered in accordance with the Conditions of Approval and statutory obligations and the environmental management strategy (or similar) and environmental management plans developed for the construction of the HTP. Monitoring and regular reporting on compliance with environmental requirements will be a core responsibility of the Environmental Manager.

EnergyCo and the network operator commit to ongoing consultation with FCNSW throughout detailed design, construction and operation of the HTP. EnergyCo acknowledges the importance of adaptive management and confirms that the project will include a comprehensive monitoring program for key environmental aspects such as biodiversity, water quality, air quality and noise. Should monitoring indicate that impacts exceed predicted levels or if unforeseen impacts occur, additional management measures would be implemented. This approach aligns with best practice and ensures ongoing environmental protection throughout the life of the project.

8.14 Fire and Rescue

The Fire and Rescue NSW (hereafter referred as FRNSW) has provided advice on the public exhibition of the EIS, dated 4 September 2025. Consideration of the items raised in their advice is provided in the following sections.

Summary of issue

FRNSW have reviewed the EIS with particular focus to *Technical Report 15 – Preliminary risk screening*. FRNSW submit no comments or recommendations for consideration, nor any requirements beyond that specified by applicable legislation at this stage.

Response

EnergyCo notes the position of FRNSW. The project will continue to consult with FRNSW during post-approval planning to finalise a bushfire emergency management and evacuation plan, as described in *Chapter 6 (Engagement)* in the EIS.

8.15 NSW Rural Fire Service

The NSW Rural Fire Service (hereafter referred as RFS) has provided advice on the public exhibition of the EIS, dated 15 October 2025. Consideration of the items raised in their advice is provided in the following sections.

8.15.1 Comments on bushfire report

Summary of issue

RFS state recommendations specified in section 7 in the bushfire report must be implemented as part of the project except where they are required to be modified as a result of below discrepancies and/or limited information available:

- the fuel loads assessed in the bush fire report are not consistent with the fuel loads identified in the comprehensive fuel load documents prepared by the RFS (dated: March 2019). As such, the modelling undertaken will be required to be re-assessed as per the correct fuel loads
- at present, a site plan showing the location of associated infrastructure and workers accommodation has not been provided for the RFS to undertake an assessment to determine the appropriate separation distance such that the works are located outside potential flame contact.

As such, a detailed site plan drawn to scale showing site setbacks is required for further assessment

- the report recommends APZs to achieve 10kW/sqm, however, a detailed slope assessment has not been provided, and it is unclear how the APZs are identified for the proposed works. Effective slope assessment is required to determine bush fire attack level (BAL). As such, a hazard assessment as identified in Appendix 2 of PBP 2019 shall be provided for further assessment.

Response

EnergyCo has acknowledged RFS's feedback on the public exhibition of the EIS. The matters raised have been reviewed and clarified, noting that the bushfire risk assessment outlined in *section 21.3, Chapter 21 (Hazards and risks)* of the EIS and *Technical Report 14 – Bushfire risk assessment* of the EIS has been prepared in accordance with *Planning for Bush Fire Protection 2019*.

Technical Report 14 – Bushfire risk assessment has been developed in accordance with PBP and the RFS fuel load assumptions. Fuel load documents referred to, and prepared by RFS (dated: March 2019) are required to be assumed where 'performance based solutions' (PBS) are utilised as part of the *Technical Report 14 – Bushfire risk assessment*. No PBS are proposed for the project. All APZs and BALs identified in *Technical Report 14 – Bushfire risk assessment* are based on 'acceptable solutions' under PBP, which adopt the standard fuel load assumptions specified by the RFS. While field-measured fuel loads were used to inform fire behaviour modelling, these modelled results were not used to determine APZ dimensions. Accordingly, APZs have been determined using PBP methodology and fuel loads, consistent with RFS guidance, and no remodelling of fire behaviour is required. Fire behaviour modelling has only been undertaken to indicate potential flame heights within the transmission line easement.

Site plans for temporary worker accommodation buildings and associated construction support infrastructure will be prepared during detailed design. For the purposes of the EIS, it was considered that construction support sites would be designed in a way that would achieve a BAL of 10 or less. This rating would be attained by ensuring appropriate setback distances, specifically by locating portable buildings sufficiently within the boundaries of each support site. Figures showing the construction support sites boundaries, with the proposed setback required to achieve a BAL of 10 or less are shown in *Appendix B of Technical Report 14 – Bushfire risk assessment*.

This approach will guide detailed layout of the construction compounds and temporary worker accommodation so that any occupiable buildings are located within areas capable of achieving BAL 10. Detailed, scaled site plans depicting vegetation setbacks and asset protection zones will be prepared at the detailed design stage.

The methodology set out in the PBP requires slope assessments extending up to 100 metres from each construction support site. These assessments were undertaken using desktop assessment methods, with slope classes determined in accordance with PBP. The proposed APZs for Olney and Bayswater South switching stations, are based on acceptable solutions under PBP using these slope classes. No PBS are proposed in relation to slope or BAL 10 asset protection zones.

8.15.2 Recommendations on bushfire protection measures

Summary of issue

In addition, the following bush fire protection measures are recommended for consideration:

- where temporary worker's accommodation is proposed, a site manager is required on site who is aware of the bush fire risk and appropriate emergency response procedures for the life of the development
- if not already included, a bush fire emergency management and operations plan must be prepared which should identify all relevant risks and mitigation measures associated with the construction and operation of the proposed transmission project. This should include:
 - detailed measures to prevent or mitigate fires igniting
 - work that should not be carried out during total fire bans
 - availability of fire-suppression equipment, access and water
 - storage and maintenance of fuels and other flammable materials
 - notification of the local NSW RFS Fire Control Centre for any works that have the potential to ignite surrounding vegetation, proposed to be carried out during a bush-fire fire danger period to ensure weather conditions are appropriate
 - appropriate bush fire emergency management planning
- the access within the project must be constructed such that the firefighting vehicles are provided with safe, all-weather access to structures and hazard vegetation and therefore must comply with relevant provisions of Table 6.8b of PBP 2019.

Response

Mitigation measure BF10 (see *Appendix D (Updated mitigation measures)* of the Amendment Report) has been adopted to address RFS recommendations relating to construction phase bushfire preparedness. Where temporary worker accommodation is proposed, a site manager will be present who is aware of bushfire risk and emergency response procedures during construction.

Bushfire preparedness, emergency arrangements and access requirements raised by the RFS will be documented in the bushfire safety system recommended under mitigation measure BF2. Emergency response and evacuation procedures will be documented in the bushfire emergency management and evacuation plan (BEMEP) recommended under mitigation measure BF1.

With respect to the specific matters identified by RFS, the following is noted:

- detailed measures to prevent or mitigate fires igniting: This is covered under mitigation measure BF2, which includes hot works management, fire-safe work procedures, vehicle access controls and smoking prohibitions, in accordance with *Technical Report 14- Bushfire risk assessment*
- work that should not be carried out during total fire bans: This is covered under mitigation measure BF2, which includes exclusion of works during elevated fire danger conditions, active fire weather monitoring and incident monitoring
- availability of fire-suppression equipment, access and water: This is covered under mitigation measures BF1 and BF2, which provide for on-site firefighting equipment, contingency response arrangements and emergency access procedures

- storage and maintenance of fuels and other flammable materials: This is covered under mitigation measure BF2 through fire-safe work procedures and controls for ignition sources and flammable materials during construction and operation
- notification of the local NSW RFS Fire Control Centre for works with ignition potential during bushfire danger periods: This is covered under mitigation measures BF1 and BF2, which include procedures for reporting fire and smoke sightings and engagement protocols with NSW RFS
- appropriate bush fire emergency management planning: This is covered under mitigation measure BF1, which includes monitoring of fire danger ratings and warnings, evacuation protocols, emergency communication, off-site refuge locations and emergency response training.

Access within construction support sites that contain temporary worker accommodation will comply with the relevant access requirements of *Planning for Bush Fire Protection 2019*. However, access to the transmission line corridor and individual tower construction sites is not required to comply with *Table 6.8b* of *Planning for Bush Fire Protection 2019*, as these locations do not contain habitable buildings.

The BEMEP would be prepared in consultation with the RFS and would ensure access arrangements are suitable for firefighting vehicles, having regard to relevant provisions of *Planning for Bush Fire Protection 2019*, including *Table 6.8b*, where applicable.

8.16 Civil Aviation Safety Authority

The Civil Aviation Safety Authority (herein referred to as CASA) provided advice on the assessment of aviation safety and impacts to aviation operations undertaken at Warkworth Aerodrome, dated 22 August 2025. Consideration of the items raised in their advice is provided in the following sections.

8.16.1 Engagement with aviation stakeholders

Summary of issue

CASA does not regulate or keep a database of Helicopter Landing Sites (or uncertified aerodromes such as Warkworth). However, it is noted on AIA page 49 AS3/5 that mine complexes and landowners will be consulted. The consultation (or completed consultation or future consultation) should include the possible requirement for aerial warning markers on the transmission lines.

It is noted that the transmission lines are within Defence Restricted area R564A and Defence is being consulted. *Consultation with the Department of Defence is ongoing. Marker ball installation may be required within Singleton Military Area and will be determined during detailed design.* (AIA page 35). Defence has a robust estate planning capability. CASA does not intend to comment on Defence estate implications (unless specifically requested by Defence).

Response

Mitigation measure AS5 requires provision of markers on transmission lines and towers within three nautical miles of an uncertified aerodrome and the Singleton Military Area to be discussed with the appropriate stakeholders during detailed design. Refer to *Appendix D (Updated mitigation measures)* of the Amendment Report for further details.

8.16.2 Aviation safety, assessment, alternatives and options

Summary of issue

If an Amendment Report is relevant for this project, (and/or if it is intended to update the AIA) the following enhancements could be considered:

- Gliding Australia (or Hunter Valley Gliding Club) comments on the AIA, with emphasis on the Indicative Emergency Response Action Review
- whether there is a possibility of moving the transmission line corridor further to the north east (for example, although it appears the river and private property could be issues). Or buried (for example, like at Western Sydney)
- confirmation that there is no additional risk of a dragging tow rope impacting the transmission lines
- confirmation that a Code 2 OLS would not be appropriate for Warkworth Aerodrome.

Response

EnergyCo has considered and responded to the submissions provided by Gliding Australia and the Hunter Valley Gliding Club in *sections 5.8 and 5.12*, respectively of this Submissions Report. Ongoing consultation is being undertaken with the Hunter Valley Gliding Club and is detailed in *section 5.12* of this Submissions Report.

When constructed, obstacle data relating to the project will be provided to CASA and Airservices Australia following the standard process and will be available consistent with CASR Part 175 for pilots' flight planning.

Alternative corridors were also considered in *section 3.3* of the EIS, with the preferred route and the associated reasoning detailed in *section 3.4* and *3.5* of the EIS.

Section 3.3 of the EIS considers potential corridor alternatives. EnergyCo's corridor selection was guided by planning pillars and principles including, people, environment, economic, strategic and technical considerations, with an objective of:

- maximising the use of mines, suitable public land and electricity easements
- minimising significant land use conflicts and impacts on people and environment
- minimising hazards and risks
- building community support
- delivering the project on time and at a reasonable cost for consumers.

A summary of preferred route options along with their advantages, disadvantages and a relevant conclusion can be found in *Table 3.5* of the EIS, and *section 3.5* of the EIS continues to detail the reasoning for the preferred route selection and provides a justification for the selection.

As it relates to the feasibility of underground transmission infrastructure, alternatives were considered in section 3.2 of the EIS and it was determined that an overhead transmission line was the preferred solution. Noting the potential benefits in some cases, there were challenges associated with constructability, operation and maintenance, ground disturbance, effective circuit length, charging current, construction time and value for money. These constraints ultimately make undergrounding the transmission infrastructure unfeasible, with the benefits associated with overhead transmission lines outweighing the negatives.

As it relates to the Warkworth Aerodrome, alterations to the alignment to the north-east is not feasible due to the following constraints:

- flooding risks from the Hunter River
- landholder impacts to Hunter Valley Operations
- landholder impacts to the Maison Dieu community
- leaseholder impacts to the stakeholders on HVO land
- biodiversity impacts to the Warkworth Sands Woodlands threatened ecological community
- Lemington Road's realignment.

Altering the tower design in proximity to the Warkworth Aerodrome was also considered, however due to design constraints, this would not be feasible, as it would result in towers being brought closer together and increase other impacts in a heavily constrained area.

CASA requested confirmation that the proposed transmission line would not introduce additional risks associated with tow-rope behaviour during glider aerotow operations. A complete assessment of tow-rope dynamics requires access to the Hunter Valley Gliding Club's Safety Management System (SMS) and operational documentation. EnergyCo has continued to engage with the Hunter Valley Gliding Club following exhibition of the EIS, and this information has been formally requested. However, the SMS and accompanying risk assessment were not made available during the development of this assessment and will not be finalised within the timeframe of this reporting. In their absence, a preliminary analysis was undertaken to determine whether any credible mechanism exists by which a tow rope could interact with the proposed transmission line.

This preliminary assessment considered the planned tower heights (85 metres), the expected climb profiles of the tow aircraft, the relative position of the tow path to the nearest tower (approximately 1.87 kilometres), and standard rope lengths and aerotow behaviour. During a typical aerotow, the tug aircraft climbs at a slightly steeper angle than the glider, resulting in the glider flying marginally lower to maintain rope tension. Using conservative assumptions, such as a 500-foot tug height and a 50-foot height differential between the tug and glider, the glider would pass the nearest point of the alignment with approximately 170 feet of vertical clearance above the transmission structure. Under these expected operational conditions, both the tug aircraft and the attached glider would maintain a vertical separation from the infrastructure.

A highly conservative rope-break scenario was also examined to consider whether a rope falling vertically beneath the glider could interact with the transmission line, noting that in this event, the glider would likely release the tow rope as part of its emergency management protocols. Using the same conservative inputs and a rope length of approximately 55 metres (180 feet), the simplified calculation indicates that the rope tip, if not released earlier, could theoretically approach the height of the tower, resulting in a worst-case difference of around three metres. This preliminary

indication suggests that rope lengths toward the lower end of the allowable range may provide additional margin in the unlikely event of a rope break occurring at the critical location, and the rope not being released from the glider. However, rope dynamics in real operations are influenced by airflow, tension, glider configuration, pilot response and towing technique, meaning this preliminary modelling cannot substitute for a complete operational risk assessment.

Final confirmation of the tow-rope risk therefore depends on a number of operational factors that are not available to EnergyCo at the time of this assessment. EnergyCo remains committed to completing this work with Hunter Valley Gliding Club and Gliding Australia and will provide relevant information to Hunter Valley Gliding Club to assist in the management of their operations and any future risk assessments.

EnergyCo has explored the feasibility of considering the Warkworth Aerodrome against the criteria of a Code 2 non-instrumental runway for the purposes of assessment, noting that it is an uncertified aerodrome and that the codes do not apply in this circumstance. Under a Code 2 classification, the theoretical take-off and approach surfaces extend substantially further than under a Code 1 scenario. When these surfaces are modelled, the closest transmission structure sits approximately 2.8 metres beneath the calculated OLS limit, meaning that although the Code 2 surface passes over the project, the proposed alignment does not infringe either the approach or take-off surfaces.

Further assessment of the OLS surfaces was considered, and it was found that the project would intersect the inner horizontal and conical surfaces under both Code 1 and Code 2 assumptions. Such infringements are not unusual and typically approved at certified aerodromes subject to aeronautical study. Because the Warkworth Aerodrome is uncertified, no approval is required under CASR Part 139. It was also considered if the Warkworth Aerodrome could functionally meet the design characteristics of a Code 2 non-instrumental aerodrome.

The analysis details that the runway at Warkworth Aerodrome would not meet key parameters as detailed in the CASR Part 139 Manual of Standards (MOS) including parameters such as runway geometry, surface condition, runway end safety areas, markings and lightings, slope limitations etc. This further indicates that a Code 2 non-instrumental runway classification is not an appropriate benchmark for the purposes of a conservative comparative assessment. Based on this assessment, no additional management measures are suggested based on the matters outside of the recommendations of *Technical Report 16 – Aviation impact assessment* of the EIS are proposed.

8.17 Airservices Australia

Airservices Australia provided advice on the assessment of aviation impacts at an unspecified date.

8.17.1 Aviation safety

Summary of issue

Airservices Australia provided no comments at this stage regarding the proposed transmission line. Airservices Australia advised that proposals involving transmission lines may necessitate an Aviation Impact Assessment and if not already completed, it is recommended that EnergyCo engage an aviation consultant to submit an application along with an AIA to Airservices.

Response

The EIS is supported by *Technical Report 16 – Aviation impact assessment* which was prepared by Aviation Projects. During the preparation of the EIS, a draft of the technical report was provided to Airservices Australia on 18 March 2025 for review and comment. Airservices Australia requested completion of the Vertical Notification Form which will be supplied to Airservices Australia during detailed design as per mitigation measure AS1 (refer to *Appendix D (Updated mitigation measures)* of the Amendment Report). Refer to *section 6 of Technical Report 16 – Aviation impact assessment* of the EIS for further details.

8.18 Subsidence Advisory

Subsidence Advisory provided advice on the EIS, dated 24 September 2025. Consideration of the items raised in their advice is provided in the following sections.

8.18.1 Statutory considerations for mine subsidence

Summary of issue

Subsidence Advisory noted that sections of the project are located within mine subsidence districts with varying risks associated with mine subsidence. As stated in the EIS, approval will be required from Subsidence Advisory NSW under section 22 of the *Coal Mine Subsidence Compensation Act 2017* for the project.

Subsidence Advisory confirmed that they have received and are currently assessing an application for the HTP. Subsidence Advisory noted that a subsidence assessment for the project by MSEC (Mine Subsidence Engineering Consultants) dated July 2025 has been provided with the application and is currently being reviewed. Subsidence Advisory stated that a determination of the application currently under assessment will be provided in due course.

Response

EnergyCo acknowledges that Subsidence Advisory have received subsidence assessment for the project and are currently assessing an application for the HTP.

8.19 Water NSW

WaterNSW provided advice on the project SEARs in May 2024 (our ref: D2024/35426) requesting direct consultation from the Proponent regarding potential impacts on water quality monitoring sites along the proposed alignment. Although such consultation did not occur, WaterNSW have reviewed the EIS and supporting documents and do not believe that the project will have an impact on WaterNSW lands or assets. As such, WaterNSW does not object to the project as proposed.

8.19.1 Impacts to WaterNSW lands and assets

Summary of issue

While it does not appear that the Project footprint will traverse any WaterNSW lands, we would like to reiterate that a number of water quality monitoring sites and groundwater bores are identified within vicinity of the Project footprint and access. In addition, the transport route crosses over some water quality monitoring sites.

We request that if interaction with any WaterNSW asset is encountered during the implementation of the project, that the Proponent contact us to discuss any potential impact, and mitigation measures prior to works commencing. The project should also ensure that ongoing WaterNSW access to the dam, water quality monitoring sites and groundwater bores is maintained.

Response

Should any unexpected impacts to or interactions with WaterNSW assets be identified by the construction contractor(s) once appointed, appropriate consultation with WaterNSW would be initiated.

8.20 Hunter Water

Hunter Water provided advice on the HTP EIS on unspecified date. Consideration of the items raised in their advice is provided in the following sections.

8.20.1 Wastewater treatment and disposal

Summary of issue

Hunter Water has no objections to approval of the EIS but requests confirmation of servicing arrangements and protection of Hunter Water's assets. Hunter Water notes that utility adjustments will be required under Developer Works Deeds and outlines application and design requirements to be addressed as part of consent.

Hunter Water requests that the following matters be included as a condition of consent:

- submit watermain and sewermain applications to Hunter Water including asset, land and easement crossings to enable advice on asset clearance and protection requirements
- provide detailed engineering designs for asset crossings for review and acceptance and enter into Works Deeds if relocation or protection of Hunter Water assets is required

- enter into a Deed of Agreement for works within Hunter Water land and easements
- Hunter Water notes that these requirements are consistent with those expected by other network utility providers and considers them suitable to be addressed as general network utility conditions.

Response

EnergyCo acknowledges the above statement from Hunter Water in its submission on the EIS.

Appendix A (*Updated project description*) of the Amendment Report has included the following additional information with regards to wastewater treatment:

Wastewater management at temporary worker accommodation facilities and construction support sites would be provided by an on-site treatment system.

The proposed treatment system would be a contained system and may include mechanical screening, biological and chemical treatment, filtration and disinfection. Waste solids produced by the treatment system would be emptied by a licensed contractor and disposed of at a nearby council operated wastewater treatment plant or other appropriately licensed facility.

Treated effluent suitable for reuse for construction purposes, which is anticipated to include dust suppression and earthworks conditioning, would be stored in sealed tanks. The project does not propose to discharge treated wastewater into receiving waterways.

Any on-site wastewater treatment plants would be subject to further design development during detailed design and would:

- *consider and confirm the most appropriate system for the project based on the preferred site layout, site conditions and constraints*
- *be designed, constructed, operated, maintained and decommissioned in accordance with best practice and relevant guidelines and standards, such as:*
 - *Onsite domestic wastewater management, Designing and Installing On-Site Wastewater Systems (WaterNSW 2019)*
 - *AS/NZS 1547:2012 On-site domestic wastewater management (Standards Australia and Standards New Zealand 2012)*
 - *Australian Guidelines for Water Recycling: Managing Health and Environmental Risks (Phase 1) (Environment Protection and Heritage Council, National Resource Management Ministerial Council, and Australian Health Minister's Conference 2006).*

Following completion of construction activities, all temporary wastewater management infrastructure would be decommissioned and removed from the project impact area.

8.20.2 Impacts to Hunter Water assets

Summary of issue

Hunter Water also notes the list of assets included in Appendix B Schedule of utility adjustments and crossings. The Proponent will be required to adjust these assets under Developer Works Deed(s) executed by Hunter Water. Hunter Water has advised the Proponent of the process to access water and, if necessary, wastewater services for the Project.

To facilitate this, Hunter Water requests that the following condition of consent is included in the development approval:

- a. The Proponent is to submit a Watermain/Sewermain Application(s) to Hunter Water including asset, land and easement crossings for the Project to enable Hunter Water to provide initial advice on asset clearance and/or asset protection requirements.
- b. Then the Proponent is to supply Hunter Water with detailed engineering designs of asset crossing for our review and acceptance and enter into Works Deed(s) if the relocation and/or protection of Hunter Water assets is required.
- c. Enter into Deed of Agreement for works within Hunter Water land and easements.

Response

The above requirements for impacts to Hunter Water assets are noted. It is expected that the requirements for undertaking any construction activities that have the potential to impact Hunter Water assets would be undertaken in consideration of the above. This obligation would be completed by the construction contractor(s) once appointed as part of detailed design and construction planning, once the nature and extent of potential impacts to Hunter Water assets identified are confirmed.

8.20.3 Project determination

Summary of issue

Hunter Water has no objections to the NSW Department of Planning, Housing and Infrastructure approving the EIS.

Hunter Water expects these requirements will be similar to those of other network utility providers. Hunter Water will be satisfied if the above requirements are suitably addressed as general requirements of network utility providers.

Response

Hunter Water's sentiment regarding the project is noted.

9

Conclusion

9 Conclusion

This chapter provides an updated justification of the project and next steps for the Hunter Transmission Project (HTP, the project).

9.1 Summary

The HTP is both critical State significant infrastructure (CSSI) and a Priority Network Infrastructure Project (PNIP) and is subject to assessment and approval in accordance with Part 5, Division 5.2 of the NSW *Environmental Planning and Assessment Act* (EP&A Act).

An environmental impact statement (EIS) was prepared to support the Energy Corporation of New South Wales (EnergyCo's) application for approval in accordance with the requirements of Division 5.2 of the EP&A Act. The EIS was prepared in accordance with the NSW Planning Secretary's environmental assessment requirements (SEARs) issued in August 2024 and the Australian Government's assessment requirements issued in March 2025.

The EIS was also prepared with reference to the *State significant infrastructure guidelines* (DPHI 2024a) and *State significant infrastructure guidelines – preparing an environmental impact statement, Appendix B to the State significant infrastructure guidelines* (DPIE 2022), the *Transmission Guideline* (DPHI 2024b), and addresses the requirements of Division 5, Part 8 of the *Environmental Planning and Assessment Regulation 2021* (EP&A Regulation).

The EIS was placed on public exhibition by the NSW Department of Planning, Housing and Infrastructure (DPHI) for 28 days between 27 August and 24 September 2025. On 25 September 2025, EnergyCo was directed to prepare a written response to all issues raised in submissions and agency advice, in accordance with section 5.17(6)(a) of the EP&A Act.

This Submissions Report has been prepared to respond to the submissions received as part of this process and has been prepared with regard to the *State significant infrastructure guidelines* (DPHI 2024a) including the content requirements for submissions reports as outlined in *State significant infrastructure guidelines – preparing a submissions report, Appendix C to the State significant infrastructure guidelines*, (DPHI, 2024c).

EnergyCo has carefully considered the content of the submissions received, and has prepared responses to the issues raised, with the responses provided in this Submissions Report. This report also describes the actions taken since the EIS was placed on public exhibition, including where submission responses have led to changes in the project assessment and/or mitigation measures since the EIS.

In response to issues raised in the submissions, stakeholder feedback received before and during the public exhibition, further design development and feedback provided by design and construct tenderers for the project, several amendments and refinements have been made to HTP. These amendments and refinements are described and assessed in the Amendment Report.

This Submissions Report, when read in conjunction with the Amendment Report, provides information about how the project has developed and how potential impacts have been further avoided, minimised, managed or offset through the proposed implementation of the revised mitigation measures.

9.2 Updated project justification

As the remaining coal-fired power stations close in NSW, the project, including the proposed amendments and refinements identified in this Submissions Report and Amendment Report is critical to unlocking the generation capacity of the Central-West Orana and New England Renewable Energy Zones (REZs). The project:

- is an urgent NSW Actionable Project under the Australian Energy Market Operator's (AEMO) *2024 Integrated System Plan* for the transition of the National Electricity Market (NEM) to renewable energy over the next 20 years
- would receive part of the \$4.7 billion allocated to the NSW Government to modernise the electricity grid under the Australian Government's Rewiring the Nation program
- is a 'Deliver Now' project under the *Network Infrastructure Strategy* (EnergyCo 2023a) to support the delivery of the NSW Electricity Infrastructure Roadmap (the Roadmap)
- is a PNIP under the *NSW Electricity Infrastructure Investment Act 2020* (EII Act) because it is essential for energy security and avoiding breaches of the NSW Energy Security Target.

The project has been developed following a robust and iterative process including detailed alternatives and options analysis, design, environmental assessment and engagement. Where feasible and reasonable, the project has aimed to avoid and minimise impacts to people and the environment. This has included changes to the transmission line corridor and construction ancillary facilities, construction methodologies, as well as assessment of alternative locations for key project components suggested by the community and other key stakeholders. This process was detailed in the EIS.

In response to further engagement and consideration of the submissions received and ongoing development of the design and construction methodology for the project, amendments and refinements were made to the project post exhibition of the EIS.

The project best balances technical and cost requirements and addresses the project objectives whilst avoiding and minimising potential impacts on people and the environment, as demonstrated in the EIS and Amendment Report.

Given the nature and scale of the project, unavoidable impacts remain. Key residual impacts include:

- biodiversity from vegetation clearance – impacts would be mitigated and offset in accordance with a Strategic Offset Delivery Agreement under Clause 6.2 of the Biodiversity Conservation Regulation 2017

- Aboriginal cultural heritage from ground disturbance during construction – some Aboriginal heritage sites may not be able to be avoided and there remains the possibility that potential unrecorded Aboriginal heritage sites and/or potential archaeological deposits were not identified and could be impacted during construction of the project. However, impacts would be minimised through management measures including the implementation of an unexpected finds protocol
- landscape and visual impacts – the new transmission infrastructure would be visible from public and private viewpoints. For easement affected landowners, compensation would consider residual visual impacts. For non-easement affected properties and for residences where the project is predicted to have a moderate to high visual impact, opportunities for screening vegetation would be investigated. Appropriate visual screening or other options would be confirmed in consultation with the affected landowner and implemented where practicable
- traffic and transport impacts – there is the potential for impacts associated with the movement of construction vehicles, plant and equipment, materials delivery and workers moving between work sites and construction support sites, though the road network would continue to perform at acceptable levels of service and intersection performance would not be impacted at most locations. Upgrades to several intersections and local roads would be required to avoid/minimise traffic impacts
- land use and property – impacts would include restrictions on some agricultural and forestry land uses in the new transmission line easement. Numerous refinements have been (and would continue to be) made to minimise impacts, and compensation would be provided for all directly affected landowners for the acquisition and use of transmission line easements.

The project includes a range of mitigation and management measures (some of which have been revised and additional measures included) to reduce the likelihood, magnitude and consequences of any residual impacts. The design and construction methodology for the project would also be refined with the objective of further avoiding and minimising potential impacts on people and the environment.

The project is consistent with the principles of ecologically sustainable development, as detailed in the EIS.

Not proceeding with the project would reduce the security of electricity supply in NSW as coal-fired power stations close. It would also discourage investment in renewable energy generation and storage within the emerging REZs. The provision of appropriate infrastructure to these zones is required to allow the adoption of new renewable technologies in the future, which is required to support the delivery of commitments and policies at a NSW Government, Australian Government and international level.

Overall, the HTP is a critical component in strengthening the supply of clean and reliable electricity to consumers and delivering long-term benefits to the NEM. Having regard to all the matters considered in this Submissions Report, the EIS and the Amendment Report, it is considered that the project is justified, as the need for, and the benefits of the project would outweigh the residual impacts associated with the HTP.

9.3 Next steps

DPHI will prepare an assessment report for consideration by the NSW Minister for Planning and Public Spaces, who will determine whether to approve the project under Part 5, Division 5.2 of the EP&A Act. If the project is approved, DPHI's assessment report and any NSW Conditions of Approval will be provided to the Australian Minister for the Environment and Water for consideration under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The Australian Minister will then decide whether the project should be approved and, if so, what Commonwealth conditions (if any) should apply.

If the project is approved, EnergyCo will continue to consult with the community, local councils, government departments/agencies and other stakeholders during detailed design, construction and operation of the project to manage and mitigate the impacts of the HTP.

10

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10 References

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Appendix A Submissions Register

This table presents a cross reference to where issues have been addressed in the report for each community submission.

Table A.1 Community submissions register (public and organisations)

Submission ID	Organisation name (if applicable)	Section(s) where issues are addressed in the Submissions Report
S-94112474	Birdlife Australia	6.1
S-95069239	The Biodiversity Council	6.2
S-95061474	Business Hunter	6.3
S-95049220	The Centre for Independent Studies	6.4
S-95079752	Committee for the Hunter	6.5
S-95003711	Dantia	6.6
S-95064219	Glencore	6.7
S-95069223	Gliding Australia	6.8
S-94935956	Hunter Joint Organisation	6.9
S-94985969	Hunter Region Landcare Network	6.10
S-94693770	Hunter Wildlife Rescue	6.11
S-94978475	Hunter Valley Gliding Club	6.12
S-95076459	Hunter Valley Operations	6.13
S-94995713	Hunter Valley Wine and Tourism Association	6.14
S-95046967	Millfield Community Association	6.15
S-95044463	Millfield Public School	6.16
S-95117969	Mindaribba Local Aboriginal Land Council	6.17
S-94870209	Mulgoa Valley Landcare Group	6.18
N/A	National Parks Association of NSW	6.19
S-95038961	Nature Conservation Council	6.20
S-94950722	NSW Apiarists' Association Inc	6.21
S-94542223	Origin	6.22

Submission ID	Organisation name (if applicable)	Section(s) where issues are addressed in the Submissions Report
S-94781206	Pokolbin Mountains Road Residents, Landholders and Users Group	6.23
S-94925206	University of Newcastle Centre for Conservation Science	6.24
S-92643457	Xatech International Pty Ltd	6.25
S-94881709	Yancoal Australia Ltd	6.26
S-92118210	N/A	5.1.2, 5.5.2
S-92240456	N/A	5.1.1, 5.1.4, 5.2.1, 5.4.3, 5.4.4, 5.4.5, 5.7.4, 5.8.2, 5.8.4, 5.9.1, 5.11.3, 5.11.4, 5.11.5, 5.13.2, 5.16.2, 5.17.2, 5.18.1, 5.19.1, 5.19.2
S-92282463	N/A	5.18.1, 5.19.1
S-92343210	N/A	5.10.1, 5.11.2, 5.19.1
S-92611207	N/A	5.1.1, 5.5.5, 5.7.3, 5.11.7, 5.16.2, 5.19.1
S-92686707	N/A	5.1.2, 5.4.2, 5.4.4, 5.5.2, 5.6.2, 5.7.3, 5.9.2, 5.11.3
S-92697462	N/A	5.1.2, 5.4.2, 5.5.2, 5.11.2
S-92766206	N/A	5.5.2, 5.11.6
S-93336707	N/A	5.1.2, 5.4.2, 5.5.2, 5.5.5, 5.8.2, 5.9.2, 5.11.2, 5.11.5, 5.16.1, 5.16.2, 5.18.1
S-93344456	N/A	5.19.1
S-93457210	N/A	5.19.1
S-93543486	N/A	5.20.2
S-93580456	N/A	5.4.2, 5.7.3, 5.8.2, 5.17.2
S-93767207	N/A	5.19.1
S-93943712	N/A	5.1.2, 5.4.2, 5.5.2, 5.5.5, 5.8.2, 5.9.2, 5.11.2, 5.11.5, 5.16.1, 5.16.2, 5.18.1
S-94036960	N/A	5.1.5
S-94045957	N/A	5.8.2, 5.8.4, 5.11.4
S-94087956	N/A	5.16.3, 5.16.4
S-94175994	N/A	5.16.3

Submission ID	Organisation name (if applicable)	Section(s) where issues are addressed in the Submissions Report
S-94193709	N/A	5.1.5, 5.4.1, 5.5.2, 5.5.5, 5.8.2, 5.11.3, 5.16.1, 5.16.2, 5.18.1, 5.19.1
S-94198717	N/A	5.4.2, 5.19.1
S-94270973	N/A	5.1.2, 5.1.3, 5.5.3
S-94320457	N/A	5.2.1, 5.8.2, 5.8.4, 5.11.2, 5.11.4, 5.13.3, 5.17.4, 5.18.1
S-94335013	N/A	5.17.3
S-94336959	N/A	5.20.1
S-94410706	N/A	5.1.2, 5.2.1, 5.4.2, 5.4.4, 5.5.2, 5.8.2, 5.11.2, 5.11.3, 5.13.2, 5.16.2, 5.17.4
S-94462956	N/A	5.16.4, 5.16.5
S-94513963	N/A	5.8.2, 5.8.4, 5.11.4
S-94563207	N/A	5.16.4
S-94573984	N/A	5.17.3
S-94613255	N/A	5.16.3, 5.16.5
S-94668223	N/A	5.4.4, 5.16.3, 5.16.5, 5.19.1
S-94668226	N/A	5.11.4, 5.16.3, 5.16.4
S-94673957	N/A	5.11.4, 5.16.4
S-94697206	N/A	5.2.1, 5.4.1, 5.4.3, 5.5.2, 5.5.4, 5.7.2, 5.8.2, 5.8.4, 5.9.1, 5.10.1, 5.10.2, 5.10.3, 5.11.2, 5.11.4, 5.11.6, 5.13.2, 5.15.2, 5.17.2, 5.17.4, 5.17.5, 5.18.1
S-94718957	N/A	5.5.3
S-94770457	N/A	5.2.1, 5.4.1, 5.4.3, 5.4.4, 5.4.5, 5.8.2, 5.8.4, 5.11.4, 5.11.7, 5.13.2, 5.17.2, 5.17.4, 5.17.5, 5.18.1
S-94780957	N/A	5.8.4, 5.11.7
S-94818719	N/A	5.1.2, 5.4.2, 5.5.2, 5.5.5, 5.7.3, 5.8.2, 5.9.2, 5.11.2, 5.11.3, 5.11.5, 5.16.1, 5.16.2, 5.18.1
S-94839461	N/A	5.19.1
S-94839725	N/A	5.19.1

Submission ID	Organisation name (if applicable)	Section(s) where issues are addressed in the Submissions Report
S-94876957	N/A	5.6.3, 5.11.7, 5.15.3, 5.17.6
S-94879975	N/A	5.1.4, 5.5.2, 5.7.3, 5.11.3, 5.11.6, 5.13.4, 5.15.2, 5.16.2, 5.17.2, 5.19.1
S-94900217	N/A	5.3.1, 5.4.1, 5.5.4, 5.6.3, 5.18.1
S-94924208	N/A	5.17.6
S-94946207	N/A	5.4.4, 5.7.2, 5.8.2, 5.11.2, 5.11.3, 5.11.5, 5.13.2
S-94949957	N/A	5.4.1, 5.4.4
S-94952721	N/A	5.7.3, 5.8.2, 5.11.2, 5.11.3, 5.13.2
S-94954711	N/A	5.4.3, 5.16.3, 5.16.4
S-94956774	N/A	5.3.1, 5.4.5, 5.5.2, 5.8.2, 5.8.4, 5.9.1, 5.11.6, 5.16.2, 5.16.6, 5.17.5, 5.18.1
S-94957709	N/A	5.16.4
S-94958737	N/A	5.4.4, 5.7.4, 5.8.2, 5.11.3, 5.11.4, 5.17.2
S-94959206	N/A	5.16.3
S-94965456	N/A	5.5.2, 5.7.4, 5.8.2, 5.11.2, 5.11.3, 5.13.3, 5.16.6, 5.17.4, 5.19.1
S-94965458	N/A	5.2.1, 5.4.3, 5.8.2, 5.8.4, 5.18.1
S-94965494	N/A	5.1.1, 5.1.3, 5.1.4, 5.4.4, 5.5.2, 5.7.3, 5.8.2, 5.9.1, 5.11.6, 5.17.2, 5.19.1
S-94965556	N/A	5.1.1, 5.3.1, 5.4.4, 5.5.2, 5.8.2, 5.13.2, 5.17.4, 5.18.1
S-94965781	N/A	5.1.1, 5.3.1, 5.4.2, 5.4.4, 5.11.5, 5.19.1, 5.19.2
S-94967706	N/A	5.1.4, 5.11.2
S-94976464	N/A	5.4.5, 5.16.5
S-94983464	N/A	5.1.1, 5.1.2, 5.5.2, 5.5.4, 5.5.5, 5.17.7, 5.18.1, 5.19.2, 5.19.3
S-94993220	N/A	5.1.2, 5.5.2

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S-94995477	N/A	5.1.1, 5.1.4, 5.2.1, 5.3.1, 5.4.2, 5.4.3, 5.4.4, 5.5.2, 5.6.2, 5.7.2, 5.7.3, 5.7.4, 5.8.2, 5.8.4, 5.9.1, 5.11.2, 5.11.3, 5.11.5, 5.11.6, 5.12.1, 5.13.2, 5.13.4, 5.14.2, 5.16.2, 5.16.6, 5.18.1, 5.19.1, 5.19.2, 5.20.1
S-94996501	N/A	5.16.4
S-94996527	N/A	5.4.4, 5.5.4, 5.14.3, 5.18.1
S-94996976	N/A	5.16.6
S-94999209	N/A	5.16.4
S-95004721	N/A	5.1.4, 5.5.2, 5.7.2, 5.8.2, 5.11.3, 5.11.4, 5.11.6, 5.17.2, 5.17.4, 5.19.1
S-95012245	N/A	5.1.1, 5.1.4, 5.2.1, 5.4.3, 5.4.4, 5.7.4, 5.8.2, 5.9.1, 5.11.3, 5.12.1, 5.13.2, 5.13.3, 5.13.4, 5.18.1
S-95013210	N/A	5.11.4, 5.16.3, 5.17.2
S-95016475	N/A	5.8.2, 5.8.4, 5.11.4, 5.11.7
S-95023957	N/A	5.1.4, 5.16.3, 5.16.5, 5.17.2
S-95028957	N/A	5.4.5, 5.7.3, 5.7.5, 5.8.2, 5.8.4, 5.10.2, 5.11.3, 5.11.4, 5.11.7, 5.13.3, 5.16.2, 5.17.2, 5.17.4, 5.17.5, 5.18.1
S-95032708	N/A	5.16.3, 5.16.4
S-95042456	N/A	5.16.3
S-95044210	N/A	5.1.2, 5.5.3
S-95047460	N/A	5.4.5, 5.16.4
S-95047724	N/A	5.4.3, 5.16.4
S-95064460	N/A	5.1.1, 5.1.2, 5.1.3, 5.4.1, 5.5.2, 5.5.3, 5.18.1, 5.20.2
S-95065706	N/A	5.1.2, 5.5.2
S-95073209	N/A	5.11.7, 5.17.1
S-95077956	N/A	5.1.5, 5.4.4, 5.5.2, 5.5.5
S-95082457	N/A	5.16.3, 5.16.4, 5.16.5

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S-95090232	N/A	5.1.4, 5.5.2, 5.7.3, 5.9.1, 5.11.3
S-95091723	N/A	5.10.1
S-95095706	N/A	5.4.5, 5.11.4, 5.16.4
S-95096004	N/A	5.5.2, 5.5.3, 5.7.3
S-95096061	N/A	5.2.1, 5.4.3, 5.8.2, 5.10.2, 5.10.3, 5.11.5
S-95096715	N/A	5.5.2, 5.1.3, 5.1.5, 5.10.1, 5.10.3, 5.14.2, 5.16.2
S-95096724	N/A	5.1.1, 5.1.3, 5.1.5, 5.10.1, 5.5.2, 5.14.2, 5.16.2
S-95097206	N/A	5.5.2, 5.10.1, 5.14.2, 5.16.2, 5.19.1
S-95097457	N/A	5.14.2, 5.16.2
S-95104707	N/A	5.4.3, 5.7.3, 5.8.2, 5.8.4, 5.9.1, 5.11.4, 5.13.3, 5.17.2, 5.17.5, 5.18.1
S-95105488	N/A	5.2.1, 5.3.1, 5.4.2, 5.4.5, 5.8.3, 5.8.4, 5.11.7, 5.15.2, 5.17.4, 5.17.5, 5.18.1
S-95106969	N/A	5.5.2, 5.8.2, 5.11.2, 5.17.4
S-95107050	N/A	5.16.3, 5.16.4, 5.16.5
S-95108231	N/A	5.1.3, 5.1.4, 5.4.1, 5.5.2, 5.7.3, 5.9.1, 5.11.2, 5.11.3, 5.11.5, 5.13.4, 5.18.1, 5.19.1
S-95108971	N/A	5.2.1, 5.3.1, 5.8.2, 5.8.4, 5.10.1, 5.14.2, 5.15.3, 5.17.4, 5.17.5, 5.18.1
S-95109207	N/A	5.16.4, 5.16.5
S-95109456	N/A	5.5.3, 5.7.3, 5.20.1
S-95109472	N/A	5.20.1
S-95109962	N/A	5.5.2, 5.20.1
S-95111206	N/A	5.20.1
S-95111215	N/A	5.19.1
S-95111221	N/A	5.20.1
S-95111958	N/A	5.19.1
S-95112715	N/A	5.5.3, 5.20.1
S-95112956	N/A	5.20.1

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S-95113211	N/A	5.20.2
S-95113956	N/A	5.20.1
S-95113962	N/A	5.20.1
S-95114221	N/A	5.20.2
S-95114223	N/A	5.20.1
S-95114463	N/A	5.19.1
S-95114481	N/A	5.10.1, 5.14.2, 5.15.2, 5.16.2
S-95114486	N/A	5.1.2, 5.1.3, 5.10.1, 5.14.2, 5.16.2
S-95114492	N/A	5.1.5, 5.5.2, 5.10.1, 5.14.2, 5.15.2, 5.16.2
S-95114706	N/A	5.20.1
S-95114715	N/A	5.1.3, 5.1.4, 5.5.2, 5.7.3, 5.9.1, 5.10.1, 5.11.2, 5.16.2, 5.19.1
S-95114723	N/A	5.1.3, 5.1.4, 5.7.3, 5.9.1, 5.10.1, 5.11.2, 5.16.2, 5.19.1
S-95114956	N/A	5.7.2, 5.8.2, 5.13.2
S-95115222	N/A	5.20.1
S-95116458	N/A	5.16.4, 5.16.5
S-95116720	N/A	5.5.2, 5.10.1, 5.14.2, 5.16.2
S-95117720	N/A	5.7.3, 5.10.1, 5.14.2, 5.16.2
S-95118460	N/A	5.4.1
S-95118467	N/A	5.20.1
S-95118708	N/A	5.1.5, 5.5.2, 5.10.1, 5.14.2, 5.15.2, 5.16.2,
S-95119211	N/A	5.20.1
S-95119217	N/A	5.19.1
S-95119224	N/A	5.19.1
S-95119227	N/A	5.20.1
S-95119958	N/A	5.7.3, 5.10.1, 5.14.2, 5.16.2,
S-95119961	N/A	5.5.2, 5.10.1, 5.14.2, 5.16.2

Submission ID	Organisation name (if applicable)	Section(s) where issues are addressed in the Submissions Report
S-95121456	N/A	5.10.1, 5.19.1
S-95121462	N/A	5.20.1
S-95121469	N/A	5.20.1
S-95121478	N/A	5.19.1