LIVERPOOL RANGE WIND FARM TEMPORARY WORKFORCE ACCOMMODATION FACILITY AMENDMENT

Submissions Report

FINAL

April 2024

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FINAL

Prepared by

Umwelt (Australia) Pty Limited

on behalf of

Tilt Renewables Australia Pty Ltd as trustee for Liverpool Range Wind Farm Project Trust

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This report was prepared using Umwelt's ISO 9001 certified Quality Management System.

Acknowledgement of Country

Umwelt would like to acknowledge the traditional custodians of the country on which we work and pay respect to their cultural heritage, beliefs, and continuing relationship with the land. We pay our respect to the Elders – past, present, and future.

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Document Status

Rev No.	Reviewer		Approved for Issue	
	Name	Date	Name	Date
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Acronyms and Abbreviations

Abbreviation	Definition
ACHA	Aboriginal Cultural Heritage Assessment
AEF	Accommodation and Employment Framework
agl	above ground level
ARDG	Australian Resource Development Group Pty Limited
BAM	Biodiversity Assessment Methodology (NSW)
BBAMP	Bird and Bat Adaptive Management Plan
BC Act	NSW *Biodiversity Conservation Act 2016*
BCS	Biodiversity Conservation and Science Directorate – part of NSW Environment and Heritage group in the NSW Department of Climate Change, Energy, the Environment and Water (NSW DCCEEW)
BCT	Biodiversity Conservation Trust (NSW). Group in the NSW DCCEEW.
BDAR	Biodiversity Development Assessment Report
BOP	Balance of Plant contractor
BOS	Biodiversity Offsets Scheme
BSP	Benefit Sharing Plan
BSSAR	Biodiversity Stewardship Site Assessment Report
CASA	Civil Aviation Safety Authority
CCC	(Liverpool Range Wind Farm) Community Consultative Committee
CEEC	Critically endangered ecological community
CWO REZ	Central-West Orana Renewable Energy Zone
DCCEEW	Commonwealth Department of Climate Change, Energy, the Environment and Water
DCCEEW (NSW)	Department of Climate Change, Energy, the Environment and Water (previously part of NSW DPE). The environment portfolio department of NSW includes the following groups: Environment and Heritage (BCS), NSW Water, BCT, NSW Environment Protection Authority, EnergyCo, NSW National Parks and Wildlife Service, BCT, Adapt NSW and NSW Climate and Energy Action group.
DPE	NSW Department of Planning and Environment (note as of 1 January 2024 the Planning portfolio has become part of DPHI and the environment portfolio has become part of NSW DCCEEW)
DPHI	NSW Department of Planning, Housing, and Infrastructure (note Planning portfolio was previously part of DPE)
DPI	Department of Primary Industries
EIS	Environmental Impact Statement
EMP	Environmental Management Plan
EP&A Act	NSW *Environmental Planning and Assessment Act 1979*
EPA	Environment Protection Authority
EPBC Act	Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*

Abbreviation	Definition
EPL	Environment Protection Licence
ESD	Ecologically Sustainable Development
ha	hectare(s)
IBRA	Interim Biogeographic Regionalisation for Australia (Version 7)
kV	kilovolt
LALC	Local Aboriginal Land Council
LGA	Local Government Area
m	metre(s)
MSW	Muswellbrook Shire Council
MW	megawatt
MWRC	Mid-Western Regional Council
NEM	National Electricity Market
NPWS	National Parks and Wildlife Service
NSW	New South Wales
OSOM	over-size and over-mass
PCT	Plant Community Type
PER	Public Environment Report
REZ	Renewable Energy Zone
RFS	Rural Fire Service
RTS	Response to Submissions
SAII	serious and irreversible impacts
SAP	site access point
SISD	Safe Intersection Site Distance
SSD	State Significant Development
TEC	Threatened Ecological Community
TfNSW	Transport for New South Wales
TIA	Traffic Impact Assessment
TMP	Traffic Management Plan
TWA	Temporary Workforce Accommodation
UHSC	Upper Hunter Shire Council
VOTW	Valley of the Winds Wind Farm
VPA	Voluntary Planning Agreement
WSC	Warrumbungle Shire Council
WTG	wind turbine generator

Glossary

Terminology	Description
Approved Project	State Significant Development Consent SSD 6696 granted on 27 March 2018 to allow for the construction, operation and decommissioning of up to 267 wind turbines with a maximum tip height of 165 m and associated infrastructure including a transmission line with an indicative capacity of 330 kV from within the wind farm to the approved connection point at Ulan.
Associated residences	Associated residences are either those landowners that have signed a: • host agreement where the landowner has a lease or infrastructure agreement in relation to their property, or • participating 'neighbour' agreement where the residence is within proximity of the Project and there is an agreement in relation to potential impacts from the Project.
Development Corridor	The Development Corridor is a micro-siting buffer within the Site Boundary which contains all of the Indicative Development Footprint of the proposed wind farm, transmission line, TWA Facility and ancillary infrastructure to allow for final detailed design and micro-siting. The Development Corridor does not refer to the development (impact) footprint. The consolidated Development Corridor is comprised of three separate areas that each encompass the relevant land areas required to deliver the wind farm, external transmission line, and TWA Facility components, referred to as the: • Development Corridor – Wind Farm. • Development Corridor – External Transmission Line. • Development Corridor – TWA Facility. There is a partial overlap of about 144.6 ha over the Development Corridor – Wind Farm and Development Corridor – External Transmission Line due to common access tracks required for the construction and operation of both components. No Development Corridor has been defined for the anticipated public road upgrades as public road alignments are generally fixed and therefore possess limited opportunities for micro-siting.
Development Corridor – External Transmission Line	The portion of the Development Corridor that includes all infrastructure related to the portion of the transmission line between the on-site collector substation, located near Rotherwood Road, and the approved point of connection to the existing network infrastructure at Ulan. The Development Corridor – External Transmission Line covers approximately 1,540.5 ha. This boundary partially overlaps with the Development Corridor – Wind Farm.
Development Corridor – TWA Facility	This portion of the Development Corridor covers approximately 14.6 ha and includes the TWA Facility infrastructure proposed to be accessed via SAP ID# 113/114, approximately 3 km east of Coolah township.

Terminology	Description
Development Corridor – Wind Farm	The portion of the Development Corridor that covers approximately 7,323.9 ha and includes all wind farm related infrastructure including the portion of the internal transmission line north of the on-site collector substation located near Rotherwood Road, Cassilis. This boundary partially overlaps with the Development Corridor – External Transmission Line. For the purposes of reporting and the biodiversity assessment (Umwelt 2023a) the overlapping portion of the Development Corridor has been assessed as part of the Development Corridor – External Transmission Line.
Indicative Development Footprint	The total estimated extent of all temporary and permanent ground disturbance and vegetation removal associated with the construction of the Project. It is estimated to be approximately 1,803 ha, comprised of: • Indicative Development Footprint – Wind Farm. • Indicative Development Footprint – External Transmission Line. • Indicative Development Footprint – Public Road Upgrades. • Indicative Development Footprint – TWA Facility.
Indicative Development Footprint – External Transmission Line	The estimated extent of all temporary and permanent ground disturbance and vegetation removal (244.4 ha) associated with the External Transmission Line associated with the construction of the transmission line (i.e. that portion of the transmission line extending south of the on-site collector substation at Rotherwood Road, Cassilis to the approved point of connection to the existing Wellington to Wollar transmission line at Ulan). It includes all temporary and permanent ground disturbance and vegetation removal required to construct access tracks within the transmission line easement, access tracks to the transmission line easement from nearby public roads, pole/tower locations, string pads and potential upgrade to Transgrid infrastructure at Ulan and vegetation removal within the balance of easement to be undertaken in accordance with Transgrid vegetation management guidelines. Further description of vegetation removal in the easement is provided in 'balance of easement' in this glossary. Connection to the proposed Central West Orana Renewable Energy Zone (CWO REZ) transmission line is the preferred connection point. In circumstances where the Project connects into the CWO REZ transmission line, the External Transmission Line would no longer be required.
Indicative Development Footprint – Public Road Upgrades	The estimated extent of all temporary and permanent ground disturbance and vegetation removal (184.7 ha) associated with the construction of the anticipated public road upgrades required as part of the Project. It is a realistic estimate of ground disturbance and vegetation removal and will be refined further during detailed design once contractor(s) are engaged. Note: this impact was not assessed as part of the Approved Project.
Indicative Development Footprint – TWA Facility	The estimated extent of all temporary and permanent ground disturbance (approximately 9 ha) associated with the TWA Facility within the Development Corridor – TWA Facility.

Terminology	Description
Indicative Development Footprint – Wind Farm	The estimated extent of all temporary and permanent ground disturbance and vegetation removal (1,364.9 ha) associated with the construction of the wind farm, located within the Development Corridor – Wind Farm generally north of the on-site collector substation at Rotherwood Road, Cassilis. Wind farm related infrastructure includes internal access tracks, wind turbine hardstands, substations, met masts, the portion of the internal transmission line north of the on-site collector substation as well as temporary facilities including concrete batch plants, construction compounds, laydown areas and vegetation removal required within the balance of easement required in accordance with Transgrid vegetation management guidelines. It excludes the public road upgrades and external transmission line.
Modification 1 (Mod-1 Project)	A modification application was submitted under section 4.55(2) of the EP&A Act. The key changes proposed in the Mod-1 Project were a reduction in the number of wind turbines to 220, an increase in the maximum blade tip height to 250 m above ground level and amendments to the associated infrastructure (including substations, internal and external transmission lines, site access and ancillary infrastructure), inclusion of potential impacts associated with the required public road upgrades, and increases to native vegetation clearance limits.
Mod-1 Amendment 1 (RTS Project)	Following public exhibition of the Mod-1 Project and review of submissions received, further consultation with agencies and further design optimisation, an amendment to the Mod-1 Project was proposed to further reduce the number of turbines to 185, reduce the maximum blade tip height to 215 m above ground level, reduce the indicative rotor diameter by 38 m, remove or relocate multiple turbines to avoid or minimise environmental impacts and further infrastructure amendments. This resulted in a reduction in the area of the Development Corridor by approximately 30%. Following submission of the Amendment 1 Report (RTS Project) correspondence was received from several government agencies. Responses to these submissions are provided in **Section 6.0**.
Mod-1 Amendment 2 (TWA Facility)	Amendment 2 involves the proposed addition of an onsite temporary workforce accommodation facility (TWA Facility) as an ancillary component of the Project. Due to an identified shortage of suitably skilled workforce and rental accommodation in the local region, and in response to government and community feedback on the Modification 1 (Mod-1 Project) and the Mod-1 Amendment 1 (RTS Project), Mod-1 Amendment 2 (TWA Facility) proposed the addition of an onsite TWA Facility. Submissions received during the exhibition period for the Amendment 2 Report (TWA Facility) are the main subject of this Submissions Report, with the exception of **Section 6.0** which relates to **Amendment 1**.
Proponent	Tilt Renewables Australia Pty Ltd as trustee for Liverpool Range Wind Farm Project Trust is the Proponent/Applicant.
Project	The Project refers to the optimised design and layout of an approved large scale wind farm project (the Project). Approval is being sought under the NSW *Environmental Planning and Assessment Act 1979* (EP&A Act) and Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) to construct, operate, maintain and decommission a wind farm with up to 185 wind turbine generators with a maximum blade tip height of 215 m above ground level (AGL), transmission line infrastructure, public road upgrades, TWA Facility, and other ancillary infrastructure.
Site Boundary	The Site Boundary of the Project includes all of the involved landholders' land parcels as well as the Indicative Development Footprint for the required public road upgrades and a public road upgrade investigation area. The Site Boundary is shown in **Figure 1.1.**

Terminology	Description
Temporary Workforce Accommodation (TWA) Facility)	The Proponent is proposing a project-specific, TWA Facility as an ancillary component of the Project, to facilitate construction of the Liverpool Range Wind Farm. The TWA Facility will be required for the duration of the construction phase of the Project, approximately four years. The TWA Facility buildings would be modular-style, fabricated off-site and transported to the Development Corridor – TWA Facility for installation within the Indicative Development Footprint – TWA Facility. The TWA Facility would have a total capacity of approximately 600 rooms, which considers a construction peak workforce of approximately 550 and additional rooms for staff required to operate and maintain the TWA Facility (such as dining and recreational facilities, wastewater treatment etc).

Executive Summary

Introduction

This Submissions Report for the Liverpool Range Wind Farm Temporary Workforce Accommodation (TWA Facility) (Mod-1 Amendment 2) has been prepared to address the key issues raised in community submissions and agency advice received during the public exhibition period. It has been prepared in accordance with the *State Significant Development Guidelines – Preparing a Submissions Report (Appendix C to the State Significant Development Guidelines)* (the Guidelines) (DPE, 2022).

This report also contains an additional section (**Section 6.0**) which addresses the additional advice received from government agencies in relation to the Mod-1 Amendment 1 Report (RTS Project) and the Mod-1 Submissions Report, which were submitted to DPE in August 2023. These responses are provided as part of this report as a formal Submissions Report has not been requested by the Department of Planning, Housing and Infrastructure (DPHI) for these additional submissions.

Project Background

Liverpool Range Wind Farm (the Project) is an approved large scale renewable energy project that is owned by Tilt Renewables Australia Pty Ltd as trustee for Liverpool Range Wind Farm Project Trust (Tilt Renewables). The Project is authorised under the NSW *Environmental Planning and Assessment Act 1979* (EP&A Act) by State Significant Development Consent SSD-6696 (Development Consent), which was granted on 27 March 2018 by a delegate of the Minister for Planning (Approved Project). The Project was originally developed by Epuron Pty Ltd and was acquired by Tilt Renewables in March 2019.

Since the Development Consent was granted, there have been significant advances in wind turbine technology and the Proponent has undertaken detailed layout review and design optimisation processes to progress the Project towards construction. As a result, the Project has undergone various iterations to arrive at the current layout and design.

The approval process for the Project in NSW to date has included:

- March 2018 – Approval granted for SSD-6696
- September 2022 – Modification 1 (Mod-1 Project) application lodged
- August 2023 – Mod-1 Amendment 1 Report (RTS Project) lodged
- December 2023 - Mod-1 Amendment 2 Report (TWA Facility) lodged.

During the exhibition period for Modification 1 (the Mod-1 Project), concern was raised by the community and local government regarding the ability to accommodate and achieve the workforce required to construct the Project, and the potential impact on services within the region. In response to this concern the Proponent engaged Umwelt to prepare an Accommodation and Employment Framework (AEF). The AEF identified both a skills and short/long term accommodation shortage within the Coolah and Cassilis areas and broader region. To address this issue, the Proponent is proposing a Project-specific, Temporary Workforce Accommodation Facility (TWA Facility) as an ancillary component of the Project, to facilitate construction. The proposed TWA Facility would be located on a privately owned, rural property (Lot 160

Deposited Plan (DP) 750744), located within the Project Site Boundary off Vinegaroy Road, approximately 3 km east of the Coolah township within the Warrumbungle Shire Council LGA.

The Mod-1 Amendment 2 Report (TWA Facility) was placed on public exhibition by the Department of Planning, Housing and Infrastructure (DPHI) from 31 January 2024 until 13 February 2024. This Submissions Report has been prepared in accordance with the *State Significant Development Guidelines – Preparing a Submissions Report (Appendix C to the State Significant Development Guidelines)* (the Guidelines) (DPE, 2022) to address the key issues raised in submissions and agency advice.

This report also contains a response to additional agency submissions received following their review of the Mod-1 Amendment 1 (RTS Project) report, and a response to the DPHI information requests in relation to that amendment.

Analysis of Submissions – Amendment 2

During the public exhibition period, 52 submissions were received, comprising 12 from government agencies, three from local Councils, four from community stakeholder groups and 33 from individual community members. In accordance with the Guidelines, multiple submissions from the same person or group should only be counted as one submission. Accordingly, two duplicate community submissions were omitted from the count, resulting in a total of 50 submissions.

Of the 35 submissions received from the community (including individuals and organisations), three (9%) were in support of the Proposed Amendment, two (6%) were comments and 30 (86%) were objections. Of the community submissions received (including objections, comments and supporting submissions) 19 (54%) were received from the local area (within approximately 5 km), 10 (29%) were from the regional area (between approximately 5 and 100 km) and six (17%) were from the broader community (greater than approximately 100 km from the Project).

Economic, environmental, and social impacts of the Project were the most frequently raised category of issues in the 30 objecting submissions received. The most frequently raised themes in objecting submissions related to social impacts, waste management, traffic and transport, and impacts to water resources. Key themes associated with the supporting submissions from the community generally related to the positive economic benefits for the local area, including employment and flow-on effects to local businesses and the positive social benefits for the local area including an improvement in local services and support for community groups.

Additional Submissions and Requests on Amendment 1

Following submission of the Mod-1 Amendment 1 Report (RTS Project) and the Modification 1 (Mod-1 Project) Submissions Report, correspondence was received from several government agencies. Additional

submission and requests were received from NSW Department of Planning, Housing and Infrastructure[1], four local councils, NSW DCCEEW Biodiversity, Conservation and Science Directorate, Transport for NSW and NSW National Parks and Wildlife Service. Responses to these additional submissions and requests are provided in this report.

Actions Taken Since Exhibition

Ongoing stakeholder engagement has continued throughout the assessment process.

Based on feedback received from government agencies, some further technical assessment of the proposed Mod-1 Amendment 2 (TWA Facility) has been undertaken since exhibition. This included:

- Updating the Addendum to the Biodiversity Development Assessment Report (BDAR), including additional documentation of measures to avoid and minimise impacts on Box Gum Woodland CEEC, and quantification of additional and appropriate measures to be implemented.
- Updating the Addendum Traffic Impact Assessment prepared by Constructive Solutions Pty Ltd.
- Ongoing investigations to establish the viability of groundwater resources on-site to supply water for the TWA Facility, as well as further assessment of the potential for groundwater use at the TWA facility to affect local vegetation
- Supplementary assessments of potential visual impacts for selected dwellings.

Responses to Submissions

Responses to the community and government agency submissions made on the Mod-1 Amendment 2 Report (TWA Facility) are provided in this Submissions Report, as well as responses to the additional submissions and requests received from government agencies following the submission of the Mod-1 Amendment 1 Report (RTS Project) and the Modification 1 (Mod-1 Project) Submissions Report.

The proposed Mod-1 Amendment 2 (TWA Facility) is a direct response to an identified social need and provides for ancillary development to facilitate the construction of the Project, and to reduce the associated impacts. The Proponent has undertaken extensive investigation into potential alternative approaches and locations for the proposed TWA Facility, consulted the community of Coolah and Cassilis and undertaken additional technical assessments with the aim of minimising associated environmental, cultural and social impacts.

As described above, a variety of additional technical assessments of the proposed Mod-1 Amendment 2 (TWA Facility) has been undertaken since exhibition, to help address and respond to the issues and questions raised in submissions. Overall, it is considered that all issues raised in submissions will be appropriately addressed via the mitigation measures proposed for the Project, and the secondary consents that will be required as part of the approvals process. The proposed mitigation measures for the Project are provided in **Appendix 2**, which includes updates based on responses to submissions. This will include development and implementation of several management plans, as well as ongoing stakeholder consultation over the life of the Project.

[1] A request for additional information was received from the Planning group within DPE. Following machinery of government changes, as of 1 January 2024 the Planning group is now within DPHI.

Conclusion

The Project, representing one of the largest approved projects within the REZ, is aligned with the NSW and Commonwealth governments' energy and climate policies and will make a meaningful contribution to achieving the goal of net zero emissions by 2050. The Project will also contribute significant capital investment within the CWO region, generate jobs during the construction and operational phases, provide indirect benefits to local services throughout the life of the Project, deliver additional income to host and other associated landowners, and provide benefits to the local community through the implementation of the proposed Benefit Sharing Program, planning agreements with local Councils, and annual access fees (related to community and employment purposes) to connect into the CWO REZ transmission line infrastructure.

The detailed impact assessment undertaken concluded that while there will be environmental and social impacts associated with the Project, the extent of impact has been minimised through the design process where possible and where impacts are predicted, the Proponent has committed to management, mitigation and offset measures to address these impacts. With the implementation of the management, mitigation and offset measures proposed by the Proponent, it is considered that the Project would result in a net benefit to the NSW community.

The Project continues to be consistent with the principles of Environmentally Sustainable Development (ESD) and the modifications and amendments made to the Project since its approval, including the addition of the TWA Facility, only serve to minimise its impacts while enhancing environmental, social and economic benefits.

1.0 Introduction

This Submissions Report for the Liverpool Range Wind Farm Temporary Workforce Accommodation (TWA Facility) (Mod-1 Amendment 2) has been prepared to address the key issues raised in community submissions and agency advice received during the public exhibition period. It has been prepared in accordance with the *State Significant Development Guidelines – Preparing a Submissions Report (Appendix C to the State Significant Development Guidelines)* (the Guidelines) (DPE, 2022).

This report also contains an additional section (**Section 6.0**) which addresses the additional advice received from government agencies in relation to the Mod-1 Amendment 1 Report (RTS Project) and the Mod-1 Submissions Report, which were submitted to DPE in August 2023. These responses are provided as part of this report as a formal Submissions Report has not been requested by the Department of Planning, Housing and Infrastructure (DPHI) for these additional submissions.

1.1 Background

The Liverpool Range Wind Farm project (the Project) is an approved large scale renewable energy project that is owned by Tilt Renewables Australia Pty Ltd as trustee for Liverpool Range Wind Farm Project Trust (the Proponent). The Project is authorised under the NSW *Environmental Planning and Assessment Act 1979* (EP&A Act) by State Significant Development Consent SSD-6696 (Development Consent), which was granted on 27 March 2018 by a delegate of the Minister for Planning (Approved Project). The Project was originally developed by Epuron Pty Ltd and was acquired by the Proponent in March 2019.

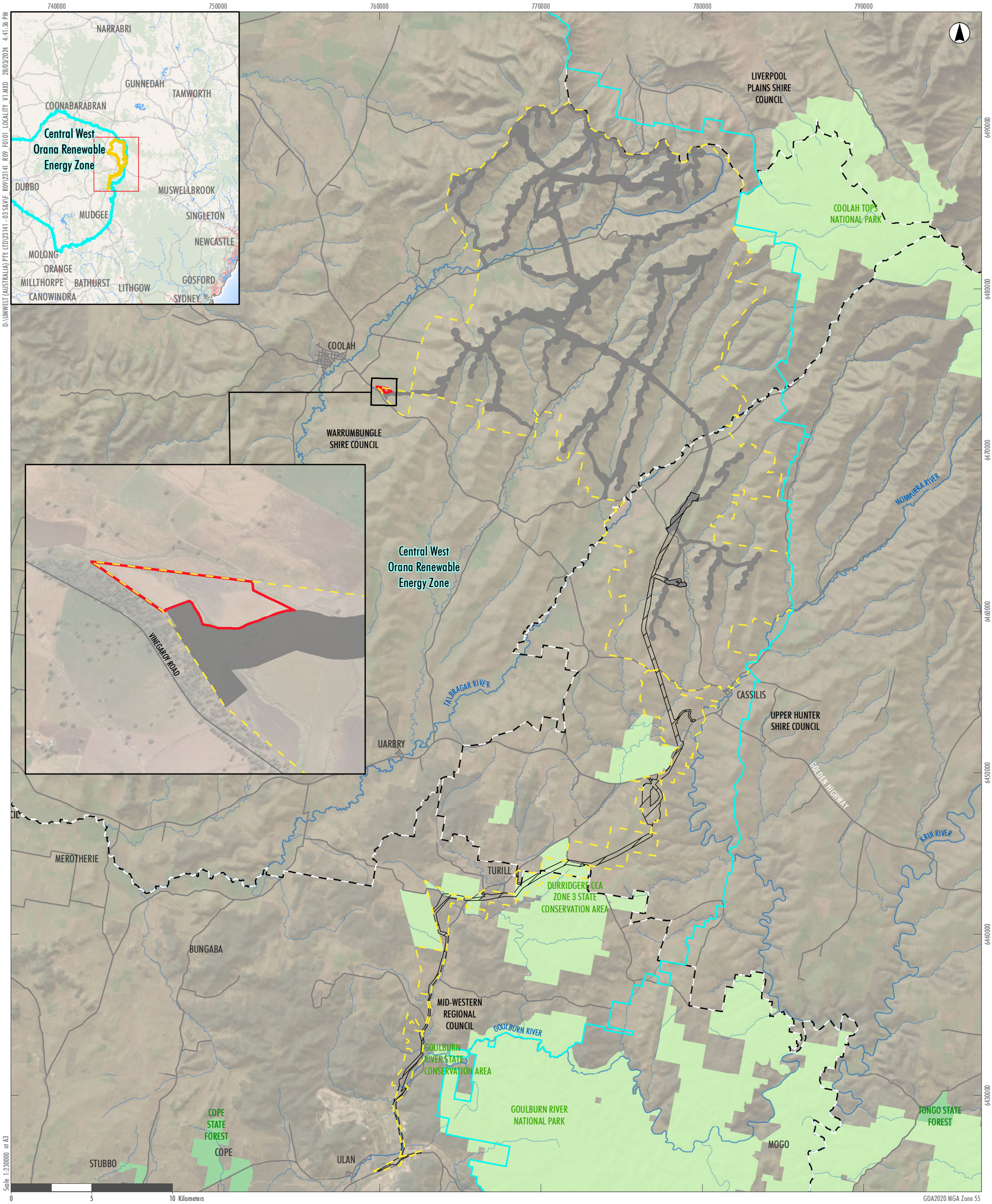
The Project site boundary spans approximately 51,337 hectares (ha) and 67.5 kilometres (km) in length from north to south. The site is located approximately 6 km east of the township of Coolah, New South Wales (NSW) and extends across the Warrumbungle, Upper Hunter and Mid-Western Local Government Areas (LGAs) (refer to **Figure 1.1**). The Project is located within, and forms a key component of, the Central-West Orana (CWO) Renewable Energy Zone (REZ) declared under the *Electricity Infrastructure Investment Act 2020* (NSW).

The Development Consent authorises the construction, operation and decommissioning of up to 267 wind turbines with a maximum tip height of 165 metres (m) and associated infrastructure including a transmission line with an indicative capacity of 330 kilovolts (kV) from within the wind farm to the approved connection point at Ulan.

Since the Development Consent was granted, there have been significant advances in wind turbine technology and the Proponent has undertaken detailed layout review and design optimisation processes to progress the Project towards construction. As a result, the Project has undergone various iterations to arrive at the current layout and design. The approval process to date is summarised in **Table 1.1** below.

Table 1.1 Approval Process to Date

Date	Project Name	Key Features
2018	Approved Project (SSD-6696)	State Significant Development Consent SSD-6696 granted to allow for the construction, operation and decommissioning of up to 267 wind turbines with a maximum tip height of 165 m and associated infrastructure including a transmission line with an indicative capacity of 330 kV from within the wind farm to the approved connection point at Ulan.
2022	Modification 1 (Mod-1 Project) (undetermined)	A modification application was submitted under section 4.55(2) of the EP&A Act. The key changes proposed in the Mod-1 Project were a reduction in the number of wind turbines to 220, an increase in the maximum blade tip height to 250 m above ground level and amendments to the associated infrastructure (including substations, internal and external transmission lines, site access and ancillary infrastructure), inclusion of potential impacts associated with the required public road upgrades, and increases to native vegetation clearance limits.
2023	Mod-1 Amendment 1 (RTS Project)	Following public exhibition of the Mod-1 Project and review of submissions received, further consultation with agencies and further design optimisation, an amendment to the Mod-1 Project was proposed to further reduce the number of turbines to 185, reduce the maximum blade tip height to 215 m above ground level, reduce the indicative rotor diameter by 38 m, remove or relocate multiple turbines to avoid or minimise environmental impacts and further infrastructure amendments. This resulted in a reduction in the area of the Development Corridor by approximately 30%. The updated project design was described and assessed in the Mod-1 Amendment 1 Report (RTS Project). Following exhibition of this report, a Submissions Report was also prepared. Following preparation of the Submissions Report, additional correspondence was received from several government agencies. Responses to these additional submissions and information requests are provided in **Section 6.0**.
2023	Mod-1 Amendment 2 (TWA Facility)	Amendment 2 involves the proposed addition of an onsite temporary workforce accommodation facility (TWA Facility) as an ancillary component of the Project. Due to an identified shortage of suitably skilled workforce and rental accommodation in the local region, and in response to government and community feedback on the Mod-1 Project and the RTS Project, Amendment 2 proposes the addition of an onsite TWA Facility. Submissions received during the exhibition period for the Amendment 2 Report (TWA Facility) are the main subject of this Submissions Report, with the exception of **Section 6.0** which relates to **Amendment 1**.



Legend

- Liverpool Range Wind Farm Project Site
- **Development Corridor**
- Development Corridor - Wind Farm
- Development Corridor - TWA Facility
- Development Corridor - External Transmission Line
- Central West Orana Renewable Energy Zone
- Local Government Boundary
- Road
- Drainage Line
- National Parks (NPWS Estate)
- State Forest

FIGURE 1.1

Locality Plan

Image Source: ESRI Basemap (2022) Data source: NSW DSFI (2022)

1.2 Mod-1 Amendment 2 (TWA Facility)

During the exhibition period for the Mod-1 Project, concern was raised by the community and local government regarding the ability to accommodate and achieve the workforce required to construct the Project, and the potential impact on services within the region. In response to this concern the Proponent engaged Umwelt to prepare an Accommodation and Employment Framework (AEF) (Umwelt, 2023). The AEF identified both a skills and short/long term accommodation shortage within the Coolah and Cassilis areas and broader region.

To address this issue, the Proponent has proposed the TWA Facility as an ancillary component of the Project, to facilitate construction. The TWA Facility is proposed to be located on a privately owned, rural property (Lot 160 Deposited Plan (DP) 750744), referred to as the Indicative Development Footprint – TWA Facility, located within the Development Corridor – TWA Facility and part of the wider Project Site Boundary off Vinegaroy Road, approximately 3 km east of the Coolah township within the Warrumbungle Shire Council LGA (refer to **Figure 1.2**). The detailed plans for the TWA Facility layout within the Indicative Development Footprint – TWA Facility will be developed by the Balance of Plant Contractor (BOP Contractor).

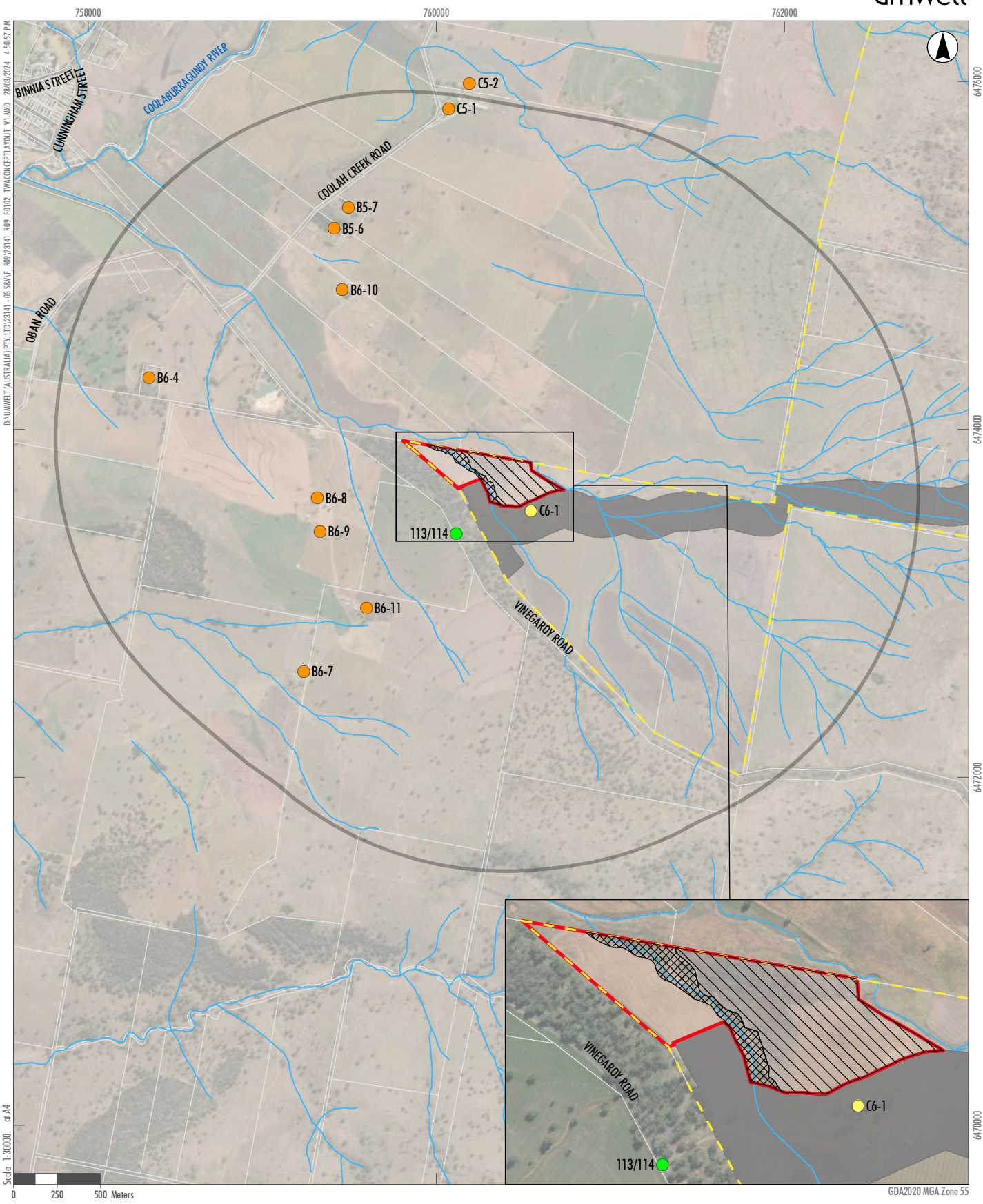
The Indicative Development Footprint – TWA Facility is predominantly cleared of vegetation and has been subject to extensive cropping activities associated with previous and current agricultural use. The Proponent investigated a number of potential locations for a TWA Facility in and around Coolah and Cassilis townships. The proposed location has been selected based on the minimal associated environmental and social impacts.

The key aspects of the TWA Facility are summarised in **Table 1.2** below.

Table 1.2 Overview of the TWA Facility

Aspect	Proposed TWA Facility
Life of TWA Facility	For the duration of the construction phase of the Liverpool Range Wind Farm project, approximately four years.
Area	The Indicative Development Footprint – TWA Facility is the estimated extent of all temporary and permanent ground disturbance, approximately 9 ha, associated with the TWA Facility within the Development Corridor – TWA Facility (approximately 14.6 ha). The TWA Facility is generally proposed to be comprised of the following: • pre-fabricated rooms • kitchen and dining room facility • administration buildings comprised of offices and reception area • recreational facilities such as a gymnasium, a bar area and BBQ facilities • maintenance and cleaning buildings for housekeeping equipment and laundry facilities • car parking for residents and support staff • supporting infrastructure/services including loading bays, and appropriately sized and located water treatment plant and sewage treatment plant.
Site Access	Accessed from Vinegaroy Road via the internal Project access tracks proposed and assessed as part of the broader Project. The TWA Facility will use the same site access point (SAP) as that proposed to access the D Cluster of turbines (SAP ID# 113/114). A basic access right/basic access left (BAR/BAL) intersection turn treatment is likely to be required at this site access point (to be confirmed during detailed design).

Aspect	Proposed TWA Facility
Timing	The TWA Facility will be progressively built in a sequenced manner that mirrors the ramp-up and ramp-down of the construction workforce required to construct the Project over an approximately four year construction period.
Employment	Construction of the TWA Facility will require a peak of approximately 40 construction workers. Ongoing operation and maintenance of the TWA Facility will require approximately 30-50 staff. Accommodation will be provided on site for staff that do not reside locally.
Hours of Operation	The TWA Facility will operate 24/7 for the entire construction period (approximately four years). Traffic movements from the TWA Facility site will generally align with construction hours associated with the Project (e.g. weekday AM peak 7 am, PM peak 6 pm).
Rehabilitation and Final Landform	Following completion of the construction of the Project, the TWA Facility would be decommissioned, and the site rehabilitated. Due to the transportable nature of the buildings, this can include either removal and disassembly or relocation to another project/location (if required). The site will be rehabilitated to form a safe, stable and non-polluting landform, restoring the land capability of the previous agricultural land use.



Legend

- Liverpool Range Wind Farm Project Site
- Development Corridor – TWA Facility
- Development Corridor – Wind Farm
- Indicative Development Footprint – TWA Facility
- No Go Area
- 2km buffer around TWA Facility
- Property Boundary
- Drainage Line
- Site Access Point

Dwelling Location

- Non-associated Dwelling
- Associated Dwelling

FIGURE 1.2

Temporary Workforce Accommodation (TWA) Facility

Image Source: ESRI Basemap (2022) Data source: NSW DSFI (2022)

1.3 Exhibition and Submissions Overview

1.3.1 Amendment 2

The Mod-1 Amendment 2 Report (TWA Facility) was placed on public exhibition by the Department of Planning, Housing and Infrastructure (DPHI) from 31 January 2024 until 13 February 2024. During the public exhibition period, 52 submissions were received, comprising 12 from government agencies, three from local Councils, four from community stakeholder groups and 33 from individual community members. An analysis of the submissions is provided in **Section 1.4**.

DPHI issued correspondence dated 15 February 2024 requesting the preparation of a written response to issues raised in submissions. This Submissions Report has been prepared by Umwelt on behalf of the Proponent in accordance with the Guidelines (DPE, 2022) to address the key issues raised in submissions and agency advice.

1.3.2 Amendment 1 Additional Agency Submissions

As outlined in **Table 1.1** , the Mod-1 Amendment 1 Report (RTS Project) and the Mod-1 Project Submissions Report were submitted to DPE in August 2023. Following submission of these two reports, correspondence was received from several government agencies. Additional submissions and information requests were received from:

- NSW Department of Planning, Housing and Infrastructure[2]
- Warrumbungle Shire Council
- Upper Hunter Shire Council
- Mid-Western Shire Council
- Muswellbrook Shire Council
- NSW DCCEEW Biodiversity, Conservation and Science Directorate
- Transport for NSW
- NSW National Parks and Wildlife Service.

Responses to these submissions and information requests are provided in **Section 6.0**.

[2] A request for additional information was received from the Planning group within DPE. Following machinery of government changes, as of 1 January 2024 the Planning group is now within DPHI.

1.4 Report Structure

In accordance with the Guidelines, this Submissions Report is structured as follows:

Section 1.0 Introduction – provides general information and background regarding the Project, submissions process and the purpose of the report.

Section 2.0 Analysis of Submissions – provides a breakdown and categorisation of the submissions received for Mod-1 Amendment 2 (TWA Facility).

Section 3.0 Actions Taken Since Exhibition – summarises the actions taken since the exhibition of Mod-1 Amendment 2 (TWA Facility), including further assessments and consultation.

Section 4.0 Response to Government Submissions – provides responses to each agency submission for Mod-1 Amendment 2 (TWA Facility).

Section 5.0 Response to Community Submissions – provides responses to key themes and issues identified in the community submissions for Mod-1 Amendment 2 (TWA Facility).

Section 6.0 Response to Additional Agency Submissions for Amendment 1 – provides a response to the additional submissions and requests received from government agencies in relation to Mod-1 Amendment 1 Report (RTS Project) and Mod-1 Submissions Report.

Section 7.0 Updated Project Justification – provides an updated justification and evaluation of the Project as a whole, having regard to relevant issues raised in submissions and responses to those issues.

Section 8.0 References – provides a list of documents cited through this report.

2.0 Analysis of Submissions

2.1 Breakdown of Submissions

During the exhibition period for the Mod-1 Amendment 2 Report (TWA Facility) 52 submissions were received. In accordance with the Guidelines, multiple submissions from the same person or group should only be counted as one submission. Accordingly, two duplicate community submissions were omitted from the count, resulting in a total of 50 submissions. **Table 2.1** provides a breakdown of the source of submissions. A detailed Submissions Register is also provided in **Appendix 1**.

Table 2.1 Submissions Breakdown

Category		Number of Submissions[1]
Government	State/Commonwealth agencies or public authorities	12
	Local Councils	3
Community	Stakeholder groups	3
	Individuals	32
	Total	**50**

Note: 1. Counts are based on the removal of duplicate submissions.

2.1.1 Government Submissions

As outlined in **Table 2.1**, submissions were received from 12 State or Commonwealth agencies or public authorities:

- Civil Aviation Safety Authority (CASA)
- NSW Department of Climate Change, Energy, the Environment and Water – Biodiversity, Conservation and Science Directorate (BCS)
- NSW Department of Climate Change, Energy, the Environment and Water – Water (DCCEEW Water)
- Department of Planning, Housing and Infrastructure – Crown Lands (DPHI Crown Lands)
- Department of Primary Industries – Agriculture (DPI Agriculture)
- Department of Primary Industries – Fisheries (DPI Fisheries)
- Environment Protection Authority (EPA)
- Fire and Rescue NSW
- Heritage NSW
- NSW Rural Fire Service
- Transport for NSW
- WaterNSW.

Submissions were also received from three local Councils:

- Mid-Western Regional Council
- Upper Hunter Shire Council
- Warrumbungle Shire Council.

The content of the government submissions is further detailed and addressed in **Section 4.0**.

2.1.2 Community Submissions

Of the 35 submissions received from the community (including individuals and organisations), three (9%) were in support of the Proposed Amendment, two (6%) were comments and 30 (86%) were objections (refer to **Figure 2.1**).

Figure 2.1 Community Submissions Breakdown

The breakdown of the 35 submissions received from the community is provided in **Table 2.2**.

Table 2.2 Community Submissions Breakdown

Group	Support	Object	Comment
Individuals	2 (6%)	28 (80%)	2 (6%)
Organisations	1 (3%)	2 (6%)	0
Total	**3 (9%)**	**30 (86%)**	**2 (6%)**

Submissions were also analysed based on proximity to the TWA Facility to determine the level of interest across the following three categories:

- local (within 5 km of the TWA Facility site)
- regional (between 5 and 100 km from the TWA Facility site)
- broader community (greater than approximately 100 km from the TWA Facility site).

It is noted that some residences in the suburbs listed as local may be greater than 5 km from the TWA Facility site. The analysis by suburb is therefore conservative in its approach as further interrogation is not possible with the raw data available from DPHI. **Figure 2.2** provides a geographical representation of where community submissions originated.

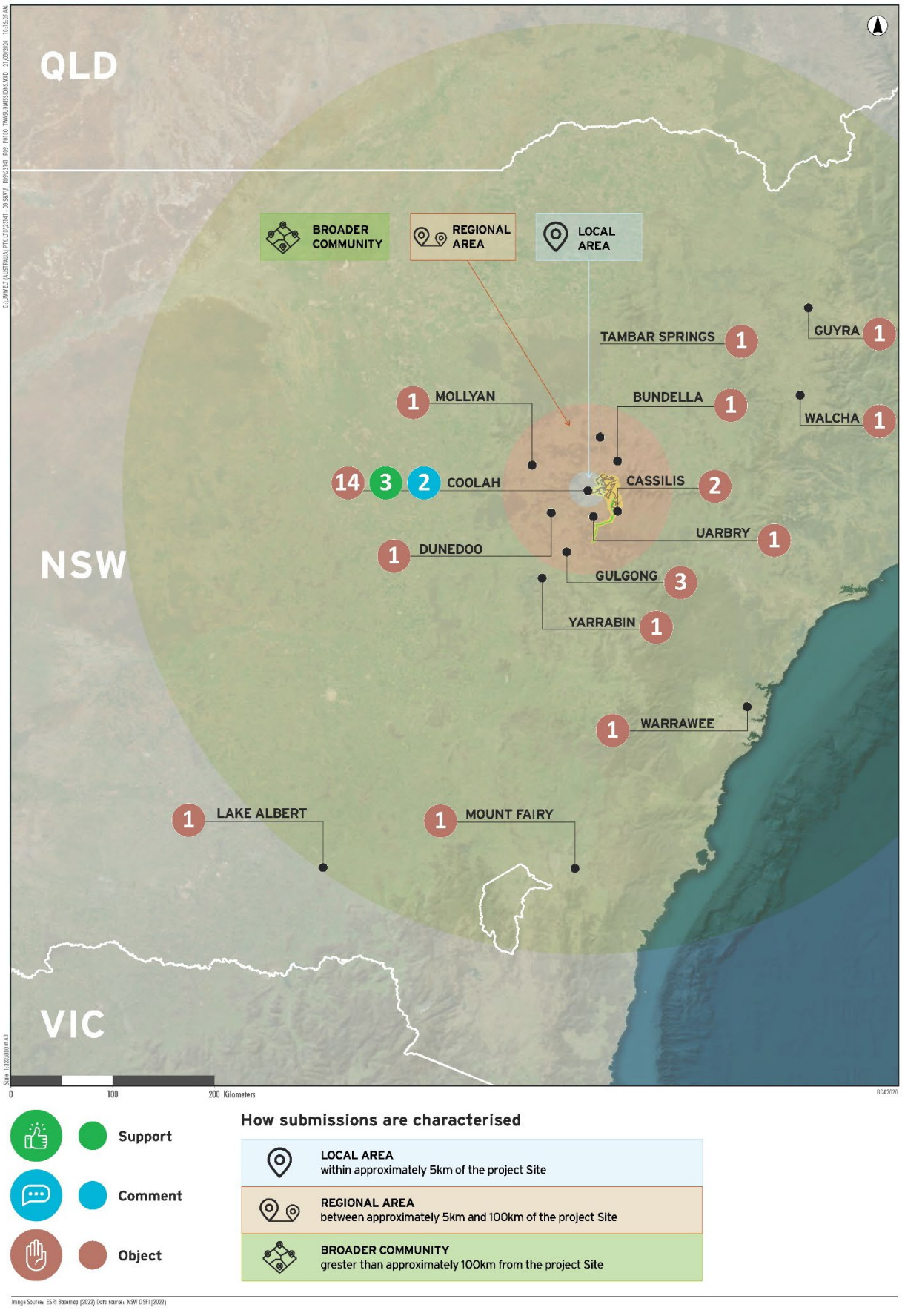


Figure 2.2 Community Submissions by Locality

Of the community submissions received, including objections, comments and supporting submissions, 19 (54%) were received from the local area, 10 (29%) were from the regional area and six (17%) were from the broader community (refer to **Figure 2.3**).

Figure 2.3 Community Submissions by Proximity

2.1.2.1 Objecting Submissions

As outlined above, 30 of the 35 community submissions objected to the TWA Facility, including 28 individuals and two organisations. Based on the analysis, 14 (47%) of objections were received from the local area (within approximately 5 km), 10 (33%) were from the regional area (between approximately 5 and 100 km) and six (20%) were from the broader community (greater than approximately 100 km from the TWA Facility) (refer to **Figure 2.4**).

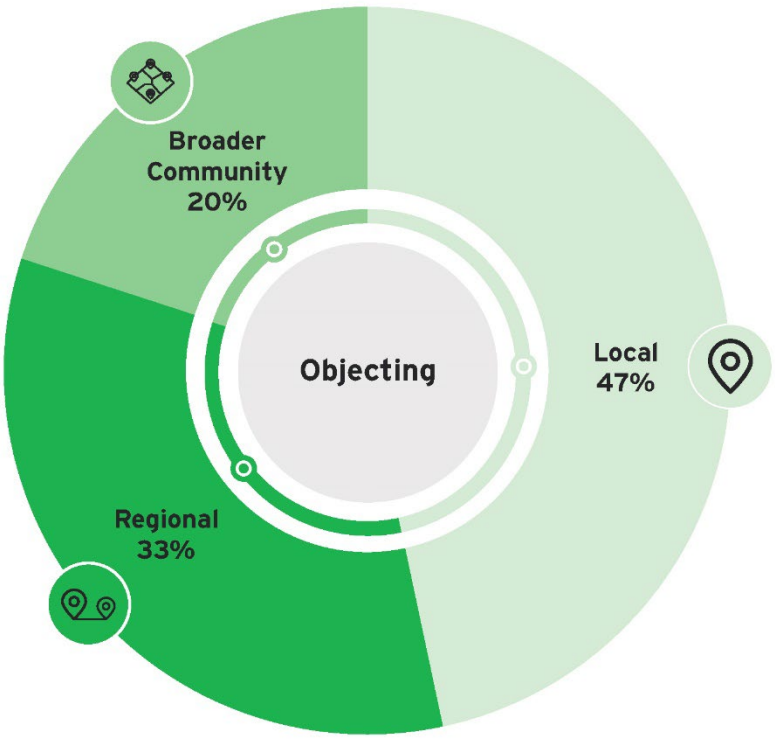


Figure 2.4 Breakdown of Objections by Proximity

2.1.2.2 Supporting and Commenting Submissions

All of the supporting submissions (three) and all of the commenting submissions (two) were received from the local area, within approximately 5 km of the TWA Facility site.

2.2 Categorisation of Issues

A content analysis was undertaken on all community submissions to gain an understanding of key issues raised in relation to the TWA Facility. Objections and supporting submissions were analysed separately, as the themes within the submissions were distinct.

In accordance with the Guidelines (DPE, 2022) relevant issues were categorised into the following broad categories:

- the project (e.g. in this case specifically the TWA Facility site, the physical layout and design, key uses and activities, timing)
- procedural matters (e.g. level or quality of engagement, identification of relevant statutory requirements)
- the economic, environmental and social impacts of the project (e.g. amenity, air, biodiversity, heritage)
- the justification and evaluation of the project as a whole (e.g. consistency of project with Government plans, policies or guidelines)

- issues that are beyond the scope of the project (e.g. broader policy issues, issues related to the Liverpool Range Wind Farm Project in general) or not relevant to the project.

These broad issue categories were then divided into themes and sub-themes where relevant to provide greater definition of the issues raised. Further details of the categorisation of issues are provided in the following sections.

2.2.1 Objecting Submissions

Economic, environmental and social impacts of the TWA Facility were the most frequently raised category of issues in the objecting submissions (refer to **Figure 2.5**). Issues beyond the scope of the TWA Facility were the second most frequently raised category of objections, with many submissions citing objections to the Liverpool Range Wind Farm Project (the Project) or wind farms in general, rather than objections specific to the TWA Facility. It is noted that there were no objections in relation to the justification and evaluation of the TWA Facility. Most submissions raised multiple issue categories, and multiple themes and sub-themes within each issue category, therefore the total number of objections shown in **Figure 2.5** exceeds the number of objecting submissions (30).

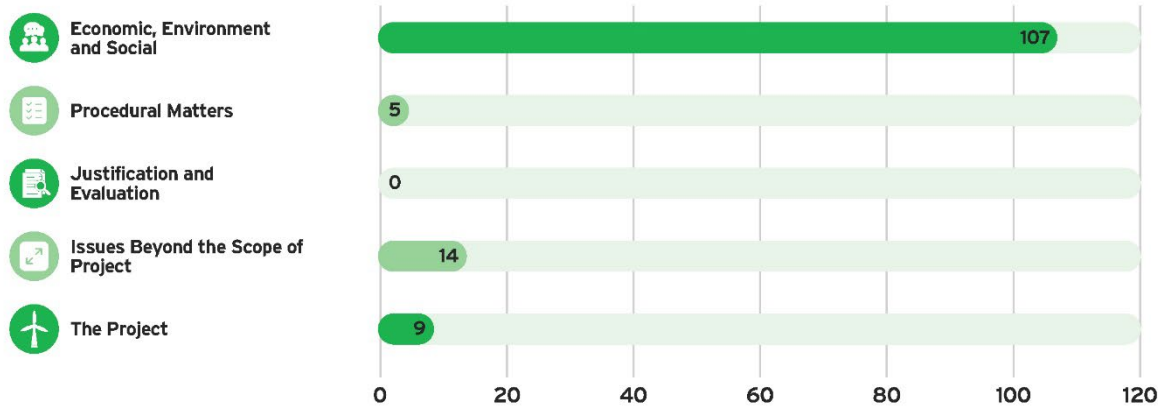


Figure 2.5 Categorisation of Objecting Submissions

Economic, environmental and social

Further categorisation of the objecting submissions in relation to economic, environmental and social impacts is provided in **Figure 2.6** below. The most frequently raised themes were social impacts (16 submissions), waste management (16 submissions), traffic and transport (15 submissions), and impacts on water resources (12 submissions).

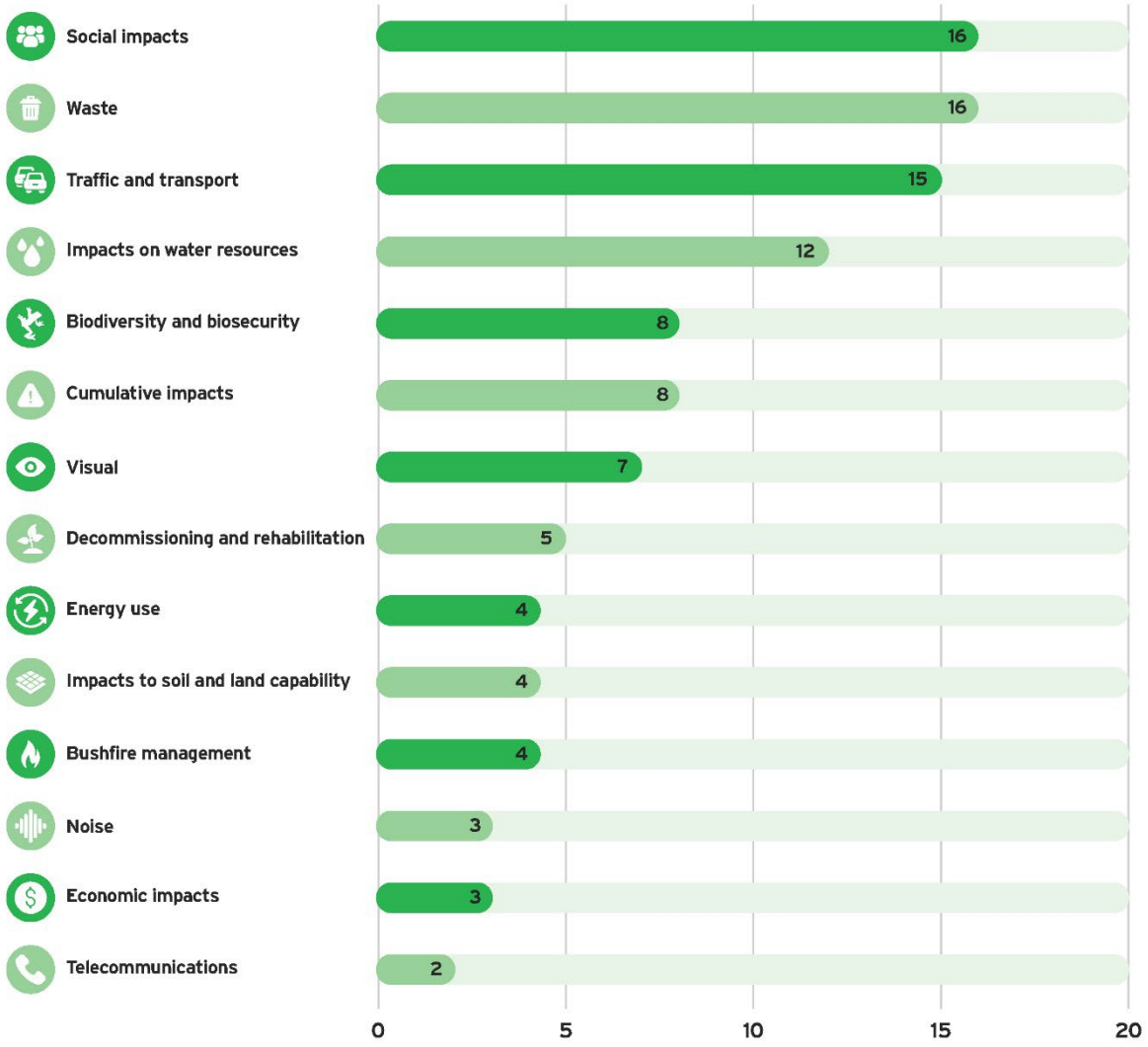


Figure 2.6 Economic, Environmental and Social Themes in Objecting Submissions

Responses to objections raised in relation to economic, environmental and social impacts are provided in **Section 5.1**.

2.2.2 Commenting Submissions

Two commenting submissions were received from the community, raising issues related to:

- economic, environmental and social impacts – waste management, social impacts (both positive and negative), bushfire management and impacts on water resources
- procedural matters – the planning process, adequacy of assessments and the engagement process.

Responses to the issues raised in commenting submissions are included with responses to objecting submissions (where applicable) in **Section 5.1**.

2.2.3 Supporting Submissions

Within the three supporting community submissions, the key themes related to:

- positive economic benefits for the local area, including employment and flow-on effects to local businesses
- positive social benefits for the local area including an improvement in local services and support for community groups.

Examples of the supporting submissions are provided below.

I support this project, the financial and social benefits for the town will be huge , people will come to town and that is a huge boost for the schools and local sports clubs and shops and pubs and the sports club which will in turn provide better health facilities , more teachers police ambulance health workers and the influx of wind farm workers spending money in town it is a win-win for everyone. S-67281707

I support the Liverpool Range Wind Farm. The wind farm will provide untold benefits to the Coolah/Cassilis district:

- *improved roads to the area.*
- *improved services to the area.*
- *increased job opportunity to the area.*
- *business opportunity to the towns people being able to subcontract to Tilt and its contractors*
- *accommodation business opportunities with the increased workforce (hotels, motel, rentals)*
- *increased business opportunities for food outlets (Sporting club, hotels, service stations, coffee shop, food vendors, supermarket)*
- *increased business opportunity for the local trades persons to contract to Tilt and its contractors (engineering, hardware, concrete, material supply, electricians, builders, plumbers, painters, labourers, concreters, transport, earthmoving)*
- *improved facilities to Coolah/ Cassilis with financial support from Tilt (per turbine through the VPA system to be spent within 20km of the wind farm)*
- *increased sponsorship to the regions charities, sporting groups, organisations, schools, preschools, radio station*
- *increased financial stability to some land holders which has the possibility to provide employment advantages.*
- *job opportunities after construction is completed with maintenance type employment with Tilt.*

This is a great opportunity for the district to move forward with an industry that will provide huge ongoing benefits and very few if any negative impacts to the area. S-67439713

As a business owner servicing the Coolah/ Cassilis area I support the construction of the Liverpool Range Wind Farm. Coolah and Cassilis work population has diminished over time and needs to be reversed. This project gives the Coolah/Cassilis area a chance to revitalise its self with the influx of business and employment opportunities that will arise. There is great opportunity for both business and the township alike to prosper economically and socially during construction and the life of the wind farm. The VPA is one such funding agreement that will see the whole district benefit with monies having to be spent within 20km of the wind farm. This will benefit every member of the community one way or another. Financial support to the community (sponsorship) will help organisations to survive. Our road network will be upgraded and maintained to the highest standard during construction. The list goes on and on. S-67438508

Supporting submissions are not addressed further in this report.

3.0 Actions Taken Since Exhibition

3.1 Project Amendments

No amendments have been made to the Project since exhibition of the Mod-1 Amendment 2 (TWA Facility) report.

3.2 Further Assessment

Based on feedback received from government agencies, some further technical assessment of the proposed Mod-1 Amendment 2 (TWA Facility) has been undertaken since exhibition. This included:

- Preparing an Addendum to the Biodiversity Development Assessment Report (BDAR) to include the ground disturbance associated with the TWA Facility. A copy of the Addendum to the BDAR is provided in **Appendix 3**.
- Additional documentation of measures to avoid and minimise impacts on Box Gum Woodland CEEC, (**Appendix 8**) and quantification of additional and appropriate measures to be implemented (attached to Appendix B in **Appendix 3**), has also been prepared in response to a request from DPHI.
- Updating the Addendum Traffic Impact Assessment prepared by Constructive Solutions Pty Ltd to assess traffic generation for the transport of quarry materials from existing quarries near Dubbo, rather than from a temporary on-site quarry, as the proposed quarry is now being assessed under a separate development application. A copy of the updated report is provided in **Appendix 4**.
- Undertaking supplementary assessments of potential visual impacts of the Project for four dwellings. This assessment was conducted by Moir Landscape Architecture Pty Ltd, and includes additional wireframe diagrams and photomontages to support the assessment of potential impacts and the need for mitigation measures (**Appendix 5**).
- Ongoing investigations to establish the viability of groundwater resources on-site to supply water for the TWA Facility). This has included further assessment of the potential for groundwater use at the TWA facility to affect local vegetation (**Appendix 6**).
- The Aboriginal Cultural Heritage Assessment (ACHA) has been updated to include the respective Aboriginal Heritage Information Management System (AHIMS) identifiers, as requested by Heritage NSW.

3.3 Ongoing Consultation

Ongoing stakeholder engagement has continued throughout the assessment process. Consultation undertaken with government agencies and the community relevant to the TWA Facility since submission of the Mod-1 Amendment 2 Report (TWA Facility) is summarised in **Table 3.1** below.

Table 3.1 Ongoing Stakeholder Consultation

Agency	Date	Discussion points
Department of Planning, Housing and Infrastructure	23 February 2024	Consultation relating to both Amendment 1 and 2 Approach to addressing submissions Next steps and timing
Local Councils	Ongoing	Negotiations with local Councils to vary the Voluntary Planning Agreements in line with the draft Benefit Sharing Guidelines. The Proponent is targeting an agreed position on the key terms of an amended VPA in the second quarter of 2024.
Community Consultative Committee	Ongoing – most recent: 14 March 2024 5 October 2023	Presentation to CCC members providing a project update, overview of consultation on the TWA Facility (October) and outcomes from consultation (March).
Neighbouring Landowners	20 March 2024	Met with four neighbouring landowners in relation to the proposed groundwater bore at the TWA Facility. Discussions involved explanation of local groundwater levels and depths and an offer to undertake data logging at neighbours' bores to measure changes in standing water levels and any impacts of pumping at the TWA Facility bore.

The Proponent continues to play an active role in both the Coolah and Cassilis communities by supporting community groups, events, infrastructure and material initiatives, including but not limited to:

- Dunedoo Show 2023
- Tunes on the Turf (2022 and 2023 funding)
- Coolah Senior Citizens events
- Coolah Golf and Bowling Day fundraiser
- Cassilis Polocrosse Club
- Coolah Men's Shed (annually)
- Coolah Roo's Sponsorship (annually)
- Coolah Dunedoo Landcare
- Coolah and Merriwa Country Education Foundations
- Boys to the Bush program
- Coolah Black Stump Craft Shop
- Coolah Swimming Club
- Cassilis Country Music Weekend
- Coolah Pre School

- RAC Resident's Program 2024
- Coolah Roos Rugby League
- Coolah Roos Rugby Union.

4.0 Response to Government Submissions

Government agencies make submissions on proposed developments relating to their areas of responsibility, and these typically relate to technical matters as well as matters requiring consideration by the consent authority or to be addressed by conditions imposed on development consents.

The following section responds to the specific matters raised by each agency submission in relation to the Mod-1 Amendment 2 Report (TWA Facility). For ease of reference, the issues raised in agency submissions are identified in the following sections in text boxes, with a response provided following each text box.

4.1 Civil Aviation Safety Authority

On 13 October 2022 CASA provided comments on the Liverpool Range Wind Farm with 220 wind turbines with a maximum tip height of 250 m Above Ground Level (AGL).

The proposed modified wind farm will comprise up to 185 wind turbines with a maximum tip height of 215 m AGL.

The previous CASA submission of 13 October 2022 remains valid. Although the turbines have reduced in height, the CASA recommendations remain the same.

The continuing validity of the CASA recommendations of 13 October 2022 is noted.

4.2 DPHI Crown Lands

As this amendment does not affect Crown Land, Crown Lands has no further comments at this time.

DPHI Crown Lands response is noted.

4.3 DCCEEW Biodiversity, Conservation and Science Directorate

Even though no clearing of native vegetation or threatened species habitat is proposed, the Biodiversity Conservation Act 2016 (BC Act) does not prescribe or identify a formal process for a proponent to 'waive' the requirement to prepare a BDAR for a modification application.

We recommend that the temporary workers accommodation is included within the EIS for Modification 1, and that the current BDAR be updated to incorporate the proposed temporary workers accommodation. This may take the form of an addendum BDAR, including a separate case in the BAM-Calculator (BAM-C), comprising the temporary workers accommodation only. This should avoid the need to reopen any aspect of the previous BDAR or BAM-C assessments undertaken to date for the project modification.

An Addendum to the BDAR has been prepared to incorporate the TWA Facility and is included in the current report as **Appendix 3**.

4.4 DCCEEW Water

4.4.1 Water Licensing and Waterfront Land

1.1 Recommendation – prior to determination

The proponent should quantify the maximum annual water requirements to meet the potable and non-potable demands for construction and operation of the project and clarify where this will be sourced.

Explanation

Insufficient information has been provided to understand the water take (potable and non-potable requirements) due to the project and if the proposed water source options are feasible. A total of 627ML over 4 years was estimated in a previous version of the project, but it is unclear if this has increased with the workers facility. Water take should be estimated at a maximum per year with a clear outline of where this will be sourced. A proposed use of town water supply, third party bores or water trades should be supported with relevant agreements.

If new bores or an increase to current bore extraction limits are proposed, it is recommended bore installation and operation be assessed as part of the SSD assessment process to avoid the need to obtain approvals separately under the Water Management Act 2000. If these are not included, relevant approvals will be required. Any water supply works must comply with the Water Sharing Plan rules.

Applications for new Water Access Licences or Water Supply Work Approvals should come to DCCEEW's Licensing & Approvals team, not WaterNSW. Where a Water Supply Work Approval is not required, the proponent should request that DCCEEW Water Group creates a Miscellaneous Work to represent the approved project area and to be nominated as the extraction point for any required Water Access Licence. Applications for dealings to nominate works on an access licence must be submitted to WaterNSW.

Expected construction water demand for the Project as a whole is approximately 150-200 ML/year (non-potable) over 4 years, equating to approximately 600 to 800 ML total (including the TWA Facility). The expected water use requirements of the TWA Facility are as follows:

- TWA Facility Construction: approximately 2,000 litres/day (0.002 ML/day) for dust suppression and vehicle/equipment washdown.
- TWA Facility Operations: Peak usage of approximately 75 kilolitres/day (0.075 ML/day) for the TWA Facility at maximum capacity (approximately 600 people) for potable/domestic water use. Demand is generally expected to be lower than this as the number of staff accommodated will ramp up and ramp down in conjunction with the progress of construction activities.

Operational water demand for the Project (i.e., after the TWA Facility has been decommissioned) is expected to be under 10 ML per year and similarly sourced.

The Project is implementing a comprehensive groundwater investigation strategy that has identified multiple groundwater sources in and around the Project Site Boundary that could supply construction water to the Project including the TWA Facility. In particular, a suitable groundwater source has been identified in proximity to the TWA Facility within the Project site boundary on Lot 160/DP 750744 and is described further in **Appendix 6**. All relevant exploration bore approvals will be obtained for commercial use for the TWA Facility. This is discussed further in **Section 4.4.2**.

DCCEEW Water's comments relating to licencing requirements are noted. The Proponent will obtain all required licences and permits for the establishment and use of a production bore at the TWA Facility site from WaterNSW. Details regarding licences and permits required for services and utilities associated with the construction and operation of the TWA Facility will be confirmed in detailed design and outlined in the relevant Environmental Management Plans (EMPs).

1.2 Recommendation – prior to determination

The proponent should review the proposed layout of the workers accommodation to ensure the buffer requirements from watercourses are consistent with the Guidelines for Controlled Activities on Waterfront Land (DPE 2022).

Explanation

It is unclear from the figures in the amendment report as to what setbacks are provided between the watercourses and workers accommodation. There is a 2nd order Strahler stream to the west and a 4th order Strahler stream to the east of the facility which should have setbacks defined in accordance with the Guidelines for Controlled Activities on Waterfront Land (DPE 2022).

A no-go zone has been designated around the western watercourse to protect riparian vegetation as Category 2 land (refer to **Figure 1.2**). The final layout is subject to detailed design which will include assessment and consideration of the Guidelines for Controlled Activities on Waterfront Land (DPE 2022). During detailed design, buffer zones will be clearly demarcated around both watercourses and where practicable all proposed infrastructure will be located outside of the vegetated riparian zone. Where works and infrastructure are required on waterfront land a site-specific erosion and sediment control plan will be prepared. Additionally, disturbed areas will be rehabilitated, and scour protection provided to bed and banks as required to mitigate any areas with increased potential for erosion due to changes in flow regimes associated with the proposed infrastructure.

The access road to the TWA Facility from Vinegaroy Road will require a waterway crossing over the 2nd order stream which will be designed in accordance with the *Guidelines for Controlled Activities on Waterfront Land* (DPE, 2022). This crossing is part of the Mod-1 Project.

1.3 Recommendation – post approval

The proponent should ensure works within waterfront land are in accordance with the Guidelines for Controlled Activities on Waterfront Land (DPE 2022).

Explanation

Works within waterfront land, including watercourse crossings, need to be in accordance with the Guidelines for Controlled Activities on Waterfront Land (DPE 2022).

All works within waterfront land including watercourse crossings will be designed and undertaken in accordance with the *Guidelines for Controlled Activities on Waterfront Land* (DPE, 2022), where applicable.

4.4.2 Local Water Utility Water Supply Impacts

2.1 Recommendation – prior to determination

The proponent should:

- *confirm how much potable and non-potable water is to be sourced from town water supplies (either directly or by water carting), and from which town water supplies. This assessment is to detail whether construction and/or operation water is needed to be sourced from town water supplies.*
- *confirm how much non-potable water is to be sourced from water storages, which water storages and the amount to be extracted from each water storage.*
- *demonstrate that the relevant local water utilities are satisfied that the relevant town water systems can accommodate the water demands without impacting existing services.*
- *confirm with the relevant local water utilities, the impact of the project and potential additional costs from infrastructure upgrades or increased operational activities.*
- *confirm water carting arrangements by providing detail that there are carting providers available to cart water for the construction phase of the project.*

Explanation

No detail has been provided on whether town water supply is a viable option should this be the preferred water source. DCCEEW encourage the proponent to engage the local water utility early in the process to determine the validity of town water supply to support the project.

A groundwater monitoring bore (BLR-4393)(ARDG, Works Approval 80WA001705) near the TWA Facility within the Site Boundary has been identified to provide the required water for both construction and potable water for the TWA Facility. It is not currently proposed to utilise any water resources under the control/management of any local Council to supply the TWA Facility, nor to engage the services of water carting suppliers.

As further detailed in **Appendix 6**, pump testing of the bore at a constant rate of 5 L/s over 72-hours indicated very high recharge rates associated with a large groundwater resource. The extraction rate undertaken for the pump test (approximately 432 kL/day) is significantly higher than the predicted peak water demand for the TWA facility (approximately 75 kL/day). This level of extraction would not need to be maintained on a permanent basis over the operational period of the TWA facility. Instead, only intermittent pumping would be needed to maintain adequate supply levels in storage tanks. Data from this test will be used to support an application to WaterNSW for a water supply work approval. Use of this bore to supply potable water for the TWA Facility may require some treatment through a small-scale plant. Testing of samples from this bore is currently underway to determine the level of treatment that may be required.

The Proponent is implementing a comprehensive groundwater investigation strategy for the Project that has identified multiple groundwater sources in and around the Project Site Boundary that could supply construction water to the TWA Facility, in the unlikely event that the bore (BLR-4393) is not granted approval for conversion to a production bore.

Subject to authority approvals, stormwater runoff from buildings may be harvested and reused on site for laundry and/or irrigation. Site stormwater runoff would typically be directed to stormwater detention pits (or tanks) from where it would be slowly released into the existing stormwater system. The stormwater management system design would not adversely affect any adjoining properties or alter the current status of discharge and would be subject to authority approval and detailed specialist engineering design.

4.4.3 Sewage Impacts

3.1 Recommendation – prior to determination

The proponent should:

- *confirm the method of disposal/transfer of sewage, effluent and/or septage, including availability of liquid waste contractors, during both the construction and operational phases.*
- *confirm with the relevant local water utility which sewerage system will receive and manage the sewage load (if this option is preferred), and if this system can accommodate the wastewater demands without impacting existing services.*
- *confirm with the relevant local water utility, the impact of the project and potential additional costs from infrastructure upgrades or increased operational activities.*
- *If wastewater is to be treated on site – ensure that all on site treatment systems are in accordance with the relevant regulations and guidelines and approved by Council.*

Explanation

The amendment report notes in section 3.2.5 that "Wastewater would be collected on site and either treated on-site or removed for treatment at a licenced wastewater treatment facility. Confirmation of wastewater management will be subject to detailed design." Both options require additional information to be supported. The option to treat wastewater on site must meet the relevant guidelines and regulations and be approved by the relevant local council. Should the wastewater be treated off-site there is a requirement to detail the impact (if any) this will have on local water utilities if wastewater is transported to different Local Government Areas.

Wastewater would be collected on site and either treated on-site or removed for treatment at a licensed wastewater treatment facility. The preferred approach is to provide an on-site sewage treatment plant in a modular wastewater treatment solution packaged in a standard shipping container. A system built into a conventional 40-foot container can achieve the required capacity and there is sufficient space on site to accommodate this. Confirmation of wastewater management will be subject to detailed design and any on-site treatment systems would be designed in accordance with relevant regulations and guidelines, in consultation with Warrumbungle Shire Council.

4.5 Department of Primary Industries – Agriculture

The Mod-1 Amendments 1 and 2 specify adjustments to the Liverpool Range Wind Farm project including updated Wind Turbine Generator technology and a 600-bed Temporary Workers Accommodation (TWA) facility 2.6km from Coolah township in a rural area. DPI has no comments on the change to the Wind Turbine construction.

The TWA is proposed on the western 15ha of 123ha Lot 160 DP750744. All of Lot 160 is mapped as Biophysical Strategic Agricultural Land (BSAL) and, apart from 0.88ha, Land and Soil Capability Class 3. The site is part of the highly productive basalt and alluvial soils of the Coolah Valley which are recognised and sought for high-value livestock production and cropping.

An alternative location for consideration was identified at Goddard Street, Coolah in the Warrumbungle Shire Council Land Use Strategy 2013. This site could be considered as an alternative to avoid agricultural lands and enable the reuse of this infrastructure for the benefit of the community in the longer term.

Assuming the proposal proceeds at the proposed site, some suggestions to mitigate the impacts on agriculture include:

- *The LUCRA provided should be strengthened by the inclusion of biosecurity considerations noting the TWA will be a relatively high-density residential development in a productive rural area. Information on local biosecurity considerations can be found at https://www.lls.nsw.gov.au/regions/central-west.*
- *Regarding the proposed vegetated screening, it is suggested that given the proposed life of the TWA (4 years), and the time for vegetation to establish, alternative mechanisms should also be used to mitigate the potential issues of light spill, noise, dust, and the visual amenity impacts of the TWA.*
- *Inclusion of 'processes and selection criteria that prioritise local procurement', in Table 7.7 of the Accommodation and Employment Framework, and inclusion in the Statement of Commitments. Warrumbungle is the 9th highest LGA in NSW for value of livestock slaughtered. The butcher shop at Coolah promotes itself as selling local meat, using a local abattoir. Using local produce will boost social licence as well as ensure the flow on of economic effects through the local community.*
  Additionally, the loss of agricultural production can impact on the viability of agricultural supply businesses like machinery servicing and rural supplies. Enabling and encouraging smaller local businesses to provide services, albeit at a smaller scale, to support parts of this development, can ensure they remain viable and available to service the ongoing agricultural businesses in the region.

In the early stages of investigations, the Proponent investigated multiple potential TWA Facility sites within the vicinity of the Coolah and Cassilis townships. Many of the sites were identified as having potential environmental and social constraints and were removed from consideration early in the assessment process. Following initial investigation and consultation with both Warrumbungle and Upper Hunter Shire Councils, two potential TWA Facility sites (the currently proposed TWA Facility site near Coolah and an alternate TWA Facility site near Cassilis) were subject to detailed analysis and community consultation.

The selection process considered a number of criteria including land use and zoning, available land area, proximity to work sites, environmental constraints, accessibility, availability of services and community engagement and support. Following consultation, feedback was received from the community which indicated only 8.8% of respondents recommended the Cassilis TWA Facility site. Additionally, approximately 45% of respondents ranked the potential negative impacts of the Cassilis site as ‘extremely significant’. Therefore, while the Cassilis site offers an alternative with a potentially lesser impact on agricultural land, other constraints (particularly those related to a lack of community support, potential noise and visual impacts and poor accessibility/proximity to work sites) made the Coolah TWA Facility site the most suitable.

While there will be a loss of approximately 9 ha of high-quality agricultural land at the Coolah site, this impact will be temporary and short-term only, as the site will be rehabilitated to its former condition after the four-year wind farm construction period. At this time the land will once again be suitable to support cropping and grazing activities.

In addition, the Proponent has made a commitment to include further mitigation and management measures, in line with those highlighted in the DPI – Agriculture submission. This includes:

- Preparation of a Biosecurity Management Plan (as part of the Project-wide Biodiversity Management Plan) which would include additional measures to reduce biosecurity risks of the Project, which will include the following in relation to the operation of the TWA Facility:
    - provision of boundary stock fencing where the TWA is adjacent to agricultural areas
    - limiting the number of TWA Facility site access points and using signage to direct site visitors to designated parking or reception areas
    - use of a visitor register
    - limiting vehicle access from the TWA Facility to agricultural areas on surrounding properties
    - implementing a feral animal control program which includes protocols for waste storage and removal, and active monitoring and surveillance.
- Use of mitigation measures to address visual impacts, in addition to the use of screen planting, as previously described in Section 6.6.3 of the Mod-1 Amendment 2 Report (TWA Facility) including:
    - Where possible, use building materials with a recessive colour palette which blends into the existing landscape and reduces contrast. The type and colour of building materials used will be determined during the detailed design phase.
    - Unnecessary lighting, signage on fences and logos will be avoided.
    - All new fixed lighting associated with the TWA Facility (operational lighting and security lighting) will be installed and maintained in accordance with the *Australian Standard AS4282 – 1995 – Control of Obtrusive Effects of Outdoor Lighting* and the *Dark Sky Planning Guideline* (DPE, 2023).
- Any proposed buildings will be sympathetic to the existing architectural elements in the landscape, to assist in minimising visual impacts.
- Implementation of a number of measures to increase the local economic benefits associated with the construction and operation of the TWA Facility, as described in Table 6.8 of the Mod-1 Amendment 2 Report (TWA Facility), including:
    - Communicate with local businesses before and during construction to aid in preparing for an incoming workforce so they can consider work opportunities.
    - Partnering with local businesses to supply key services onsite such as laundry, catering and cleaning services.
    - Develop a local Procurement Policy for local businesses.
    - Develop a list of potential local businesses that could support during the TWA Facility construction (and later operations) period.

4.6 Department of Primary Industries – Fisheries

DPI Fisheries has reviewed the turbine and infrastructure changes and provides the following recommendations for conditions;

- *Waterway crossings such as access tracks, reticulation cabling and transmission lines are to be designed and constructed in accordance with Why do Fish Need to Cross the Road? Fish Passage Requirements for Waterway Crossings (2003) and the Policy and Guidelines for Fish Habitat Conservation and Management (Update 2013).*
- *DPI Fisheries policy advocates the use of terrestrial buffer zones as per the Policy and Guidelines for Fish Habitat Conservation and Management (Update 2013) available on the Department's website at http://www.dpi.nsw.gov.au/fisheries/habitat/publications/policies,-guidelines-and-manuals/fish-habitat-conservation which states that "NSW DPI will generally require riparian buffer zones to be established and maintained for developments or activities in or adjacent to TYPE 1 or 2 habitats or CLASS 1-3 waterways." The department anticipate that adequate riparian buffer zones will be maintained adjacent to the watercourses as part of this project, particularly where the Temporary Workforce Accommodation Facility near Coolah is to be located as the endangered Southern Purple Spotted Gudgeon, Mogurnda adspersa are mapped as being potential present immediately downstream of this accommodation facility in an unnamed drainage line adjacent to Vinegaroy Road.*

As described in **Section 4.4.1** above, a no-go zone has been designated around the western watercourse to protect riparian vegetation as Category 2 land (refer to **Figure 1.2**). As discussed in **Section 4.4**, during detailed design, buffer zones will be clearly demarcated around both watercourses and appropriate erosion and sediment control measures will be designed, established and maintained for the life of the development.

All waterway crossings required for the Project will be designed and constructed in accordance with *Why do Fish Need to Cross the Road? Fish Passage Requirements for Waterway Crossings* (2003) and the *Policy and Guidelines for Fish Habitat Conservation and Management* (Update 2013). The BOP Contractor will consult with NSW DPI Fisheries during detail design and construction for any works over a designated waterway.

4.7 Environment Protection Authority

The EPA has reviewed the TWA Facility Amendment Report and supporting documentation. The EPA understands that there may be some noise exceedances for construction noise at some residences and that all feasible and reasonable management mitigation measures must be implemented to minimise noise impacts from the project.

The EPA has no further comment to other aspects of the TWA Facility Amendment Report and that we have previously provided advice on the project and original amendment to MOD-1 of the consent.

The EPA comment on construction noise is noted. The Proponent has made a commitment to the implementation of all feasible and reasonable work practices and mitigation measures during construction, as outlined in Section 6.2.2.1 of Appendix G of the Mod-1 Amendment 2 Report (TWA Facility). This may include measures such as:

- Screening equipment particularly in the south-west and north-west directions, to minimise noise emissions towards the affected receivers.
- Installing broadband or 'white noise' reversing alarms (in lieu of tonal reversing alarms) on all site-based equipment.

- Arranging the site such that equipment can operate with a forward-in/forward-out movement to minimise the need for reversing to occur (and as such minimise the use of reversing alarms).
- Shutting down equipment when it is not in use to avoid periods of excessive idling.

The EPA reminds the Proponent of the requirement to make an application to the EPA for an Environment Protection Licence (EPL) as required under Schedule 1 of the Protection of the construction activities and operation of the windfarm.

The need for an Environment Protection Licence (EPL), as required under Schedule 1 of the *Protection of the Environment Operations Act 1997*, for the construction and operation of the wind farm is noted.

4.8 Fire and Rescue NSW

FRNSW refers to our previous letter dated 21 September 2023, (D23/91869), Advice on Amendment Report for LIVERPOOL RANGE WIND FARM – MOD 1 – TURBINE AND INFRASTRUCTURE CHANGES (SSD-6696-MOD-1). All recommendations made in this letter are still applicable to this project.

It is deemed that the amendment has limited scope and application regarding additional hazards or special problems of firefighting. FRNSW submit no additional comments or recommendations for consideration, nor any requirements beyond that specified by applicable legislation at this stage.

The Fire and Rescue NSW response regarding the applicability of recommendations made on the Mod-1 Project is noted.

4.9 Heritage NSW

The Addendum Aboriginal Cultural Heritage Assessment (ACHA), prepared in consultation with Registered Aboriginal Parties, identifies that the Amendment will result in minor additional impacts to known Aboriginal objects when compared to the previously assessed Mod-1 Project Area and the Approved Project Area. It is further understood that the likelihood of additional measurable impacts to any unknown Aboriginal objects is assessed to be low as the area proposed for the temporary workforce accommodation facility is considered to have low archaeological potential.

Heritage NSW agrees with the proposed management measures (Section 6 of the Addendum ACHA) but provides the following comment:

- *Please provide evidence that the Aboriginal cultural heritage sites identified during the earlier surveys completed for the Mod-1 Project Area in 2020 and 2021 have been uploaded to the Aboriginal Heritage Information Management system (AHIMS) and update the ACHA to include each respective AHIMS identifiers.*

All Aboriginal cultural heritage sites identified in earlier surveys completed for the Mod-1 Project have been uploaded to AHIMS and the Aboriginal Cultural Heritage Assessment (ACHA) has been updated to include the respective AHIMS identifiers. The updated ACHA has been provided to Heritage NSW.

4.10 NSW Rural Fire Service

Following consideration of the amended MOD 1 application, the NSW RFS provides the following amended recommendations to be included in any consent granted:

1. A Fire Management Plan (FMP) shall be prepared in consultation with NSW RFS Castlereagh Fire Control Centre. The FMP shall include:

- *24 hour emergency contact details including alternative telephone contact;*
- *Site infrastructure plan;*
- *Fire fighting water supply plan;*
- *Site access and internal road plan;*
- *Construction of Asset Protection Zones (APZ) and their continued maintenance;*
- *Location of hazards (Physical, Chemical and Electrical) that will impact on fire fighting operations and procedures to manage identified hazards during fire fighting operations;*
- *Emergency Management Plan that includes triggers for temporary workers accommodation evacuation;*
- *Such additional matters as required by the NSW RFS District Office (FMP review and updates).*

2. Asset protections zones (APZ)

- *A minimum 50 m APZ around wind farm infrastructure. APZs will be established and maintained around WTG sites and compounds (construction, office, substations, sheds or the like). APZ are to be in accordance with the requirements of Appendix 4 of Planning for Bush Fire Protection 2019;*
- *Temporary workers accommodation:*
  - *a minimum 12 metre APZ to grassland hazard;*
  - *a minimum 24 metre APZ to woodland hazard;*
  - *APZ are to be in accordance with the requirements of Appendix 4 of Planning for Bush Fire Protection 2019.*

3. Water supply and gas services

A 20,000 litre water supply (tank) fitted with a 65mm storz fitting shall be located at each construction and office/ maintenance compound within the required APZ.

- *Temporary workers accommodation:*
  - *a minimum 100,000 litre fire fighting water supply is to be located on the internal access road;*
  - *where hydrants are to be provided, hydrants shall be installed to:*
    - *fire hydrant spacing, design and sizing comply with the relevant clauses of AS 2419.1:2021; and*
    - *fire hydrant flows and pressures comply with the relevant clauses of AS 2419.1:2021.*
- *where fire hose reels are to be installed:*
  - *constructed in accordance with AS/NZS 1221:1997, and*
  - *installed in accordance with the relevant clauses of AS 2441:2005:*
- *reticulated or bottled gas is to be installed and maintained in accordance with AS/NZS 1596:2014 and the requirements of relevant authorities:*
  - *all fixed gas cylinders are kept clear of all flammable materials to a distance of 10m and shielded on the hazard side;*
  - *connections to and from gas cylinders are metal;*
  - *polymer sheathed flexible gas supply lines - are not used; and*
  - *above-ground gas service pipes are metal, including and up to any outlets.*

4. To allow for emergency service personnel to undertake property protection activities, an trafficable vehicle access is to be provided around the perimeter of each of the WTG sites, substations, compounds and temporary workers accommodation.

5. Internal access roads

- *designed and regularly maintained to ensure good trafficability to wind turbines and associated infrastructure.*
- *temporary workers accommodation - Internal access roads shall be designed in accordance with Chapter 5 of Planning for Bush Fire Protection 2019.*

6. Where landscaping is proposed to provide visual screens to dwellings

- *landscaping shall be located >100 metres from dwellings or;*
- *landscaping located <100 metres from dwellings shall be in accordance with the requirements of Appendix 4 of Planning for Bush Fire Protection 2019.*

7. The Environmental Operations Plan shall incorporate:

- *wind turbines shall have aviation lighting fitted and operational when aerial fire fighting is occurring in the locality; and*
- *blade rotation shall cease when aerial fire fighting is occurring in the locality.*

8. Temporary workers accommodation

- *new construction shall comply with Sections 3 and 7 (BAL 29) Australian Standard AS3959-2018 Construction of buildings in bush fire-prone areas or NASH Standard (1.7.14 updated) National Standard Steel Framed Construction in Bushfire Areas – 2014 as appropriate and Section 7.5 of Planning for Bush Fire Protection 2019.*

The amended recommended conditions of consent provided by NSW Rural Fire Service are noted and the Proponent is committed to ensuring compliance of the TWA Facility with all related conditions of consent.

The Proponent and BOP Contractor will prepare a Fire Management Plan for the Project, incorporating the TWA Facility, to include all relevant requirements listed in the conditions of consent.

4.11 Transport for NSW

1. It is unclear where the background traffic volumes for the existing TIA were obtained. Current intersection traffic counts are required to be obtained at the Golden Highway/Vinegaroy Road intersection and must be collected in accordance with Austroads Guide to Traffic Management Part 3. The raw traffic counts will need to be provided as an appendix to the revised TIA.

The background traffic volumes used in the updated assessment were based on local traffic count data recorded in October 2022, adopted from the Central-West Orana Renewable Energy Zone Transmission Project Technical Paper 13 – Traffic and Transport, prepared by WSP for EnergyCo (2023). The background traffic count information for the Golden Highway (including the intersection with Vinegaroy Road) can be found in Section 5.1 and Appendix 1 of the Update to the Addendum Traffic Impact Assessment: Temporary Workforce Accommodation Facility (CSPL, 2024) (refer to **Appendix 4**).

2. Clarification of the background growth rate is required to be provided. Reference shall be made to the Golden Highway Corridor Strategy.

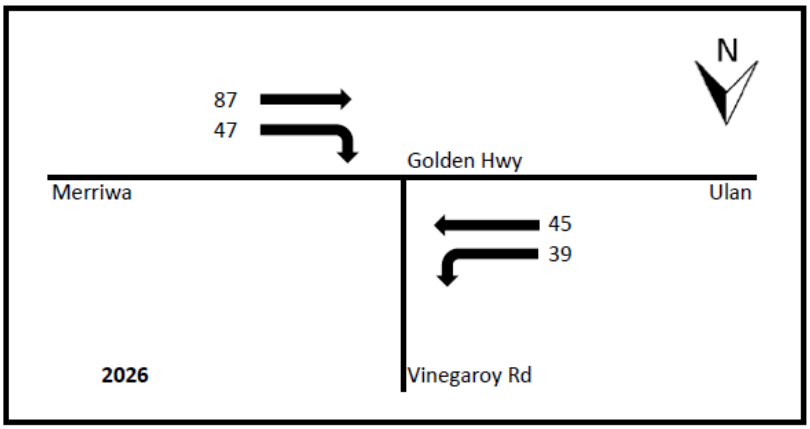
Considering that the local Average Daily Traffic (ADT) along the Golden Highway between Ulan Road and Merotherie Road for October 2022 was surveyed to be 930 vehicles per day, an assumed growth rate of 1.0% was applied to determine the Annual Average Daily Traffic for 2026 (the peak period of construction). The applied growth rate is consistent with the Golden Highway Corridor Strategy (published by Transport for NSW (TfNSW) in October 2016) which stated that the annual traffic growth across the corridor has been steady at between 1-2% across the region. It is also considered conservative as the EnergyCo assessment did not apply a background traffic growth factor on the basis that conditions recorded at several TfNSW traffic count stations in the region reflected zero background traffic growth. This information is located in Section 5.1 of the Update to the Addendum Traffic Impact Assessment: Temporary Workforce Accommodation Facility (CSPL, 2024) (refer to **Appendix 4**).

3. Diagrammatically demonstrate AM and PM peak hour movements at Golden Highway/Vinegaroy Road intersection which shows the current intersection volumes vs the development intersection volumes. The development intersection volumes is to assume a worst case scenario and include the existing volumes + background growth for the horizon year + development traffic for the worst case scenario (light vehicles+ heavy vehicles + OSOM movements at AM/PM peak hour) + cumulative traffic volumes of surrounding developments applied to the background network AM/PM peak. The turn warrant assessment is required to be based on the identified worst case scenario presented within this point.

The AM and PM peak hour vehicle movements at the Golden Highway and Vinegaroy Road intersection are shown in **Figure 4.1** and **Figure 4.2** below, which have been reproduced from Section 5.3.1 and Section 5.4.1, respectively, of the Update to the Addendum Traffic Impact Assessment: Temporary Workforce Accommodation Facility (CSPL, 2024) (refer to **Appendix 4**). The intersection diagrams represent background traffic with a 1% growth rate plus the addition of the updated peak daily wind farm and transmission line construction traffic volumes which included the worker light vehicle distribution for the proposed TWA Facility.

The following assumptions are applied to the intersection assessments, as detailed in Section 4.1.3 of the Update to the Addendum Traffic Impact Assessment: Temporary Workforce Accommodation Facility (CSPL, 2024) (refer to **Appendix 4**):

- 100% of quarry deliveries will turn left to enter Vinegaroy Road from the west along Golden Highway
- 100% of heavy vehicles will be travelling north and turning right with only 25% of the total daily heavy vehicle movements occurring during the AM peak hour
- 100% of oversize over-mass (OSOM) vehicles will be travelling north and turning right
- no OSOM movements occurring during the AM peak hour
- no OSOM movements occurring during the PM peak hour
- Workforce light vehicle traffic distribution is:
    - 85% of the daily traffic travels from the proposed TWA Facility to the Project site and will not utilise this intersection
    - 5% of the daily traffic travels from Coolah along Vinegaroy Road to the Project site and will not utilise the intersection
    - 5% of the daily traffic travels along the Golden Highway (west) and will turn left into Vinegaroy Road, and of this 5% distribution, 100% will travel during the AM peak hour
    - 5% of the daily traffic travels along the Golden Highway (east) and will turn right in Vinegaroy Road, and of this 5% distribution, 100% will travel during the AM peak hour.



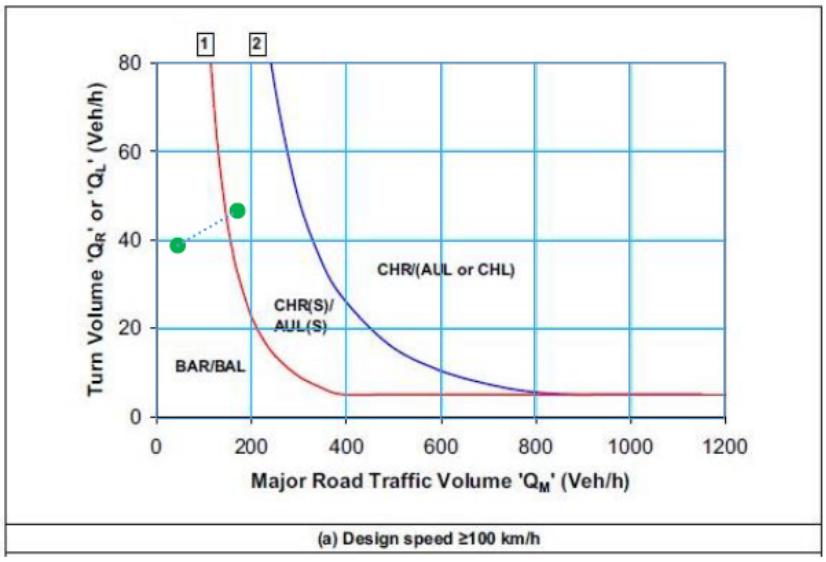


Figure 4.1 Golden Highway and Vinegaroy Road Intersection Analysis Results, AM Peak Hour

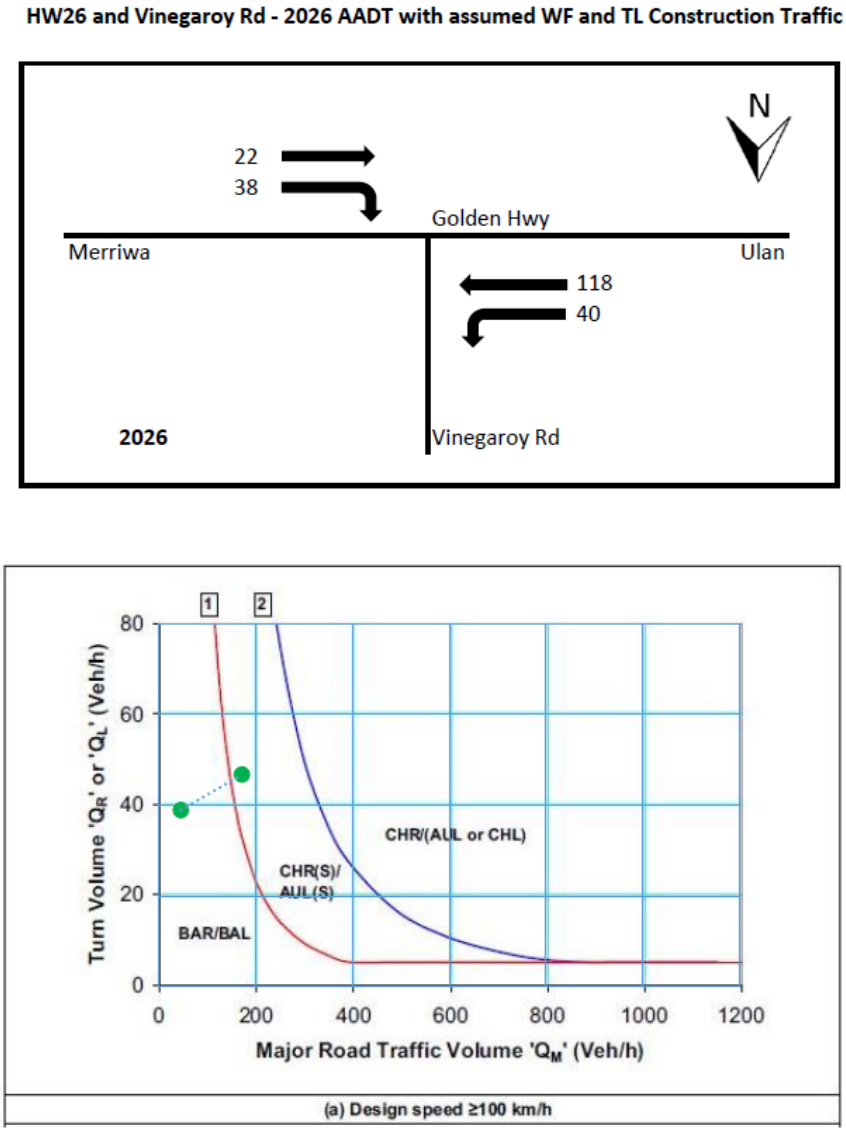


Figure 4.2 Golden Highway and Vinegaroy Road Intersection Analysis Results, PM Peak Hour

Additional intersection assessments for the AM and PM peak hours are also provided in the Update to the Addendum Traffic Impact Assessment: Temporary Workforce Accommodation Facility (CSPL, 2024) (refer to **Appendix 4**) for the Vinegaroy Road and Rotherwood Road, Vinegaroy Road and Turee Vale Road, Vinegaroy Road and D1-Cluster entrance/TWA Facility entrance (SAP ID#113/114) and Vinegaroy Road and Coolah Creek Road intersections.

4. It is noted in Section 4.2.1 that there is a statement "It is understood that EnergyCo will be responsible for the design and delivery of the Golden Highway / Vinegaroy Road intersection upgrade as part of the broader roll-out of the CWO REZ. It is understood that EnergyCo and TfNSW will determine the ultimate design of that intersection." EnergyCo will be responsible for the OSOM upgrades, however, Tilt Renewables (LRWF) will be required to undertake the intersection treatments. The strategic design of the required intersection treatments as determined by the turn warrants is required to form part of the TIA (which forms part of the EIS) to ensure that environmental approval (pursuant to Part 4 of the EP and A Act 1979) is obtained for the scope of the intersection treatments for Vinegaroy Road/Golden Highway intersection.

It is understood that EnergyCo will be responsible for the design and delivery of the Golden Highway and Vinegaroy Road intersection upgrade as part of the broader roll-out of the CWO REZ. EnergyCo and TfNSW will determine the ultimate design of that intersection. EnergyCo will be responsible for the upgrades necessary to accommodate OSOM deliveries. The Proponent will provide input to this design using the Project traffic numbers to inform the intersection turn treatment upgrades that are required.

The strategic designs for the Golden Highway and Vinegaroy Road intersection are provided in Appendix 2 of the Update to the Addendum Traffic Impact Assessment: Temporary Workforce Accommodation Facility (CSPL, 2024) (refer to **Appendix 4**).

5. Clarification regarding the timing and additional workforce required to construct the Temporary Workforce Accommodation is required. It is also unclear based on the sequencing for the construction at what stage the Temporary Workforce Accommodation will be provided to fully accommodate the 550 staff that account for the non-local workforce, as it appears that the accommodation will be provided in stages. Therefore, the TIA is required to provide a conservative assessment of the traffic generation at the peak of construction and accounting for the parallel construction activities, the additional workforce required for the construction and operation of the Temporary Workforce Accommodation.

The TWA Facility will be constructed progressively in anticipation of workforce increases for the Project. As the peak workforce is expected approximately two years into construction, the TWA Facility is expected to be fully constructed by that stage. The timing will depend on the progress of the wind farm construction activities. Analysis of the traffic requirements indicates that BAR/BAL is required to access the TWA Facility and this will be communicated to EnergyCo as an input into their designs.

Peak daily construction traffic volumes, including wind farm, transmission line and TWA Facility traffic, are provided in Table 8 of the Update to the Addendum Traffic Impact Assessment: Temporary Workforce Accommodation Facility (CSPL, 2024) (refer to **Appendix 4**). This clearly shows that peak traffic volumes are predicted from week 54 to week 114 for the wind farm construction program, i.e., year two of construction which has been modelled as occurring in 2026.

6. The addendum report has not identified if the heavy vehicles and heavy vehicles requiring escort will be increased during the AM/PM peak because of the inclusion of the temporary workforce accommodation and the fact that activities may be overlapping or occurring in parallel. The TIA is required to be revised to provide a breakdown of the additional traffic associated with all vehicle types and assess the cumulative impact associated with the peak of construction because of the inclusion of the Temporary Workforce Accommodation Facility.

Peak daily construction traffic volumes, including wind farm, transmission line and TWA Facility traffic, are provided in Table 8 of the Update to the Addendum Traffic Impact Assessment: Temporary Workforce Accommodation Facility (CSPL, 2024) (refer to **Appendix 4**).

The Addendum TIA introduced the proposed TWA Facility as part of the Project and found no material change in the overall estimated number of vehicle movements, however, changes were made to the assumed workforce trip-origins and subsequent movements. The construction period for the TWA Facility is estimated around 2 years and will require approximately 50 heavy vehicle and 300 light vehicle one-way movements per week to transport required construction materials, plant, equipment and labour. Construction of the TWA Facility will be one of the first construction activities to commence and will finish prior to peak wind farm construction activity to ensure sufficient capacity needed to accommodate the

Project workforce. Because these movements will occur early in the program, they will not increase the peak construction vehicle movement numbers from the traffic model.

The Addendum TIA concludes that overall construction traffic for the TWA Facility will be negligible compared to the overall construction of the Project, and the Proponent's proposed road upgrade designs will accommodate these traffic movements.

It should be noted additional information on assessment of safe intersection sight distances (SISD) for site access points is provided in **Appendix 9**, in response to a request from DPHI (see **Section 6.1.2**).

4.12 WaterNSW

WaterNSW has reviewed the project amendment report (Umwelt – August 2023) with the supporting documents and considers that the proposal amendments are unlikely to impact on any WaterNSW land, assets or infrastructure. As such, we have no comment to make.

The WaterNSW response is noted.

4.13 Mid-Western Regional Council

Council supports the establishment of temporary workforce accommodation facilities close to the site to accommodate incoming non-resident workforce.

Services and Utilities

Water

Potable Water:

Council notes water sources are not defined in the amendment report and the requirement of up to 2000 L/day construction water and 75kl/day potable water will be required.

Council advises it does not have the capacity to support this quantity of water from the local water treatment plant. Potable water will be required to be sourced from alternate sources, and cannot be sourced from local water carters accessing Council's potable supply.

Construction Water:

At this point in time, the Proponent should not be relying on Mid-Western Regional Council sources (directly or through third parties) for construction activities, as the capacity to supply this does not exist.

Disposal of Sewage

Council notes that the disposal of sewage is not defined in the amendment report.

Council advice is that Gulgong Sewage Treatment Plant (STP) does not have any facilities to receive septage or sewage collected/tankered from sites not serviced by the town sewage collection system. In the Mid-Western Region, Mudgee STP is the only site that can receive such tankered waste.

Mudgee STP has an existing septage disposal facility designed to receive up to 20KL/day of tankered sewage/septage. This facility has been designed to receive septage from Council's rural domestic customers, and as such any capacity made available to this commercial project will need to be via consideration of STP upgrades.

Camp Waste

Council wishes to advise that none of its waste facilities are appropriate or capable of handling the disposal of landfill or accommodation camp waste generated by the project. Recyclable materials may be accepted at Mudgee Waste Facility, with pre-approval from Council.

Water

A groundwater monitoring bore (BLR-4393) (ARDG, Works Approval 80WA001705) near the TWA Facility within the Site Boundary has been identified to provide the required water for both construction and potable water for the TWA Facility. It is not currently proposed to utilise any water resources under the control/management of any local Council to supply the TWA Facility, nor to engage the services of water carting suppliers.

As further detailed in **Appendix 6** pump testing of the bore at a constant rate of 5 L/s over 72-hours indicated very high recharge rates associated with a large groundwater resource. The extraction rate undertaken for the pump test (approximately 432 kL/day) is significantly higher than the predicted peak water demand for the TWA facility (approximately 75 kL/day). This level of extraction would not need to be maintained on a permanent basis over the operational period of the TWA facility. Instead, only intermittent pumping would be needed to maintain adequate supply levels in storage tanks. Data from this test will be used to support an application to WaterNSW for a water supply work approval.

Use of this bore to supply potable water for the TWA Facility may require some treatment through a small-scale plant. Testing of samples from this bore is currently underway to determine the level of treatment that may be required.

The Proponent is implementing a comprehensive groundwater investigation strategy for the Project that has identified multiple groundwater sources in and around the Project Site Boundary that could supply construction water to the TWA Facility, in the unlikely event that the bore (BLR-4393) is not granted approval for conversion to a production bore.

Sewage

Wastewater would be collected on site and either treated on-site or removed for treatment at a licensed wastewater treatment facility. The preferred approach is to provide an on-site sewage treatment plant in a modular wastewater treatment solution packaged in a standard shipping container. A system built into a conventional 40-foot container can achieve the required capacity. Confirmation of wastewater management will be subject to detailed design, in consultation with Warrumbungle Shire Council.

Waste

The Proponent is committed to consulting further with relevant Councils and waste disposal operators to determine an optimal solution for waste disposal. A Waste Management Plan will be developed for the management of waste from the TWA Facility and, where possible, any waste will be collected and recycled through existing recycling centres in the local community. General waste would be managed on-site via waste collection and recycling facilities, and then transported to a licensed landfill facility by an appropriately licensed contractor. Recyclable materials may be accepted at Mudgee Waste Facility, with pre-approval from Mid-Western Regional Council (as per the submission above). Other comments from Council are noted relating to capacity to take general waste.

It is also noted that the BOP Contractor will need to identify ways to effectively procure goods and manage waste in accordance with the waste hierarchy while meeting merit criteria requirements as part of the CWO REZ connection agreement with EnergyCo.

4.14 Upper Hunter Shire Council

Council has reviewed the proposed amendment and has no further comments in relation to the matters raised in our submission dated 10 October 2022 and the applicant's response to these matters, however, we note that Council is yet to review and negotiate a revised planning agreement for the modified project. As stated in our submission, Council will be requiring a review and renegotiation of the planning agreement because of the substantial and fundamental changes reflected in the Mod, compared to the original project.

The Proponent is currently in the process of renegotiating the VPA that was executed by both Warrumbungle Shire Council (WSC) and Upper Hunter Shire Council (UHSC) in July 2019, to be generally in line with the Draft Benefit Sharing Guidelines (DPE, 2023). The Proponent proposes that the VPA is fair and reasonable, ensures lasting legacy benefits are delivered to the local Coolah and Cassilis communities, and provides some decision-making power for the community to determine how Community Enhancement Funds are allocated. The Proponent is targeting agreement on the terms of the amended VPA in April 2024. Legal drafting of the amended VPA would commence shortly thereafter.

4.15 Warrumbungle Shire Council

Please note the comments herein relate only to the TWA and must be read in conjunction with all prior submissions made by Council in relation to the full Liverpool Range Wind Farm Modification.

DPHI should therefore note that Council objects to the Modification in totality because, inter alia, it does not satisfy the criteria to be deemed a modification. And, a key component of the project, namely a large greenfield quarry, is yet to be even assessed.

On the specifics of a TWA, Council considers such a facility is essential if the Modification was to be approved by the NSW State Government, despite Council's strong objection.

There are however several matters pertaining to the TWA listed herein that require satisfactory resolution.

Comments from Council are noted. The Mod-1 Amendment 2 (TWA Facility) is a direct response to an identified need for construction workforce housing and provides for ancillary development to facilitate the construction of the Project, increasing the financial viability and reducing the potential impacts associated with the construction phase of the Project.

As outlined in the Mod-1 Amendment 2 Report (TWA Facility), Australian Resource Development Group Pty Ltd (ARDG) is proposing a project-specific quarry to supply resources to construct the Project. This will be subject to a separate State Significant Development (SSD) assessment and approval process, which will include stakeholder consultation.

2. TWA Technical Specifications and Operations

Based on information provided there appears to be a discrepancy in the footprint proposed for the TWA with both 6 ha and 10 ha being proposed. Council requests clarification of this matter.

It is noted that no dwelling entitlement is permissible for the site under Clause 4.2A under the Warrumbungle LEP, as doesn't meet the minimum lot size requirements. Will a construction certificate (under Part 6 of the EP&A Act) be sought prior to construction?

Council also seeks:

a) A clear definition as to what the Capital Investment Value of the total wind farm development now is, inclusive of all the alterations arising from the Mod.

b) More information on security arrangements for the TWA, including details on security fencing and the provision of a gatehouse.

c) Will shuttle buses be used to transport workers from the TWA to the Project site and into Coolah for key events, and if not, why not?

d) Have traffic numbers for servicing and supply deliveries of the TWA been included in the traffic numbers?

e) Rules and procedures for the management of alcohol on site.

f) Information on whether qualified medically trained staff will be based on site 24/7, and if not, why not? If yes, then details please regarding their likely scope of work.

g) Will there be land use conflicts with neighbouring agricultural activities such as spray drift?

h) Will the Coolah community have increased impact from vehicle lights travelling to and from the TWA as they pass through the township, noting this will often fall in night hours?

i) How will business opportunities be made available for local businesses (as a result of the TWA as per pg. 37) - what will procurement and tendering look like to ensure local businesses are included and have an opportunity?

j) In Table 3.2 a figure of 125 L/person/day is provided, equating to 75kl/day of water to site (for 600 persons); generating 75k/L of waste water per day. This may be an under estimation; as per A/S 1547:2012 Table H2 where the typical domestic wastewater design flow allowances for fixtures is listed as 150L/person/day.

The Proponent has reviewed the development areas and confirms that the Development Corridor – TWA Facility is approximately 14.6 ha while the Indicative Development Footprint – TWA Facility is approximately 9 ha.

The TWA Facility is part of the Liverpool Range Wind Farm Project and the Minister for Planning is the consent authority. Construction of the TWA Facility will be assessed for approval through the SSD process via a modification/amendment to SSD-6696.

The following clarification is provided for additional items (a) to (j):

a) It is understood that WSC's request for the Capital Investment Value (CIV) is to inform negotiations for the amendment to the executed VPA. The Proponent proposes to progress discussions on the VPA with WSC and UHSC on the basis of the Draft Benefit Sharing Guidelines (Department of Planning and Environment, 2023) which references a dollar per MW value.

b) Perimeter fencing will only be required to prevent access by livestock from neighbouring properties. Perimeter fencing is not typically required for safety or security. However, secure fencing and lockable gates will be required around the Water Treatment Plant (WTP) area and the detention pond. Security gates and controls are not typically required for a TWA Facility however, the BOP Contractor may choose to install some safety controls to ensure only village or invited guests have access to the TWA Facility e.g., electronic swipe card access to the allocated rooms. This would be determined during detailed design.

c) Consultation with WSC will be conducted as part of the development of the Traffic Management Plan. The trip-origins of workforce light vehicles have been adjusted in the Mod-1 Amendment 2 Report (TWA Facility) based on the location of the proposed TWA Facility. Further mitigations may be considered including use of buses to reduce light vehicle movements once the BOP Contractor is engaged and the effective management of workforce movements can be negotiated in more detail.

d) The introduction of the TWA Facility does not materially change the number of vehicles movements estimated for the overall Project however, some changes were required to the workforce light vehicle trip-origins and movements that were assumed in the Supplementary TIA. This influences the number and type of turning movements and the required turn treatments at relevant intersections along Vinegaroy Road. This information is presented in the Update to the Addendum Traffic Impact Assessment: Temporary Workforce Accommodation Facility (CSPL, 2024) (refer to **Appendix 4**).

e) The Environmental Management Plan (EMP) for the TWA Facility will establish roles, responsibilities, authority, and accountability of all key personnel involved in the environmental management of the TWA Facility. The EMP will be prepared prior to TWA Facility operations and will include relevant management/mitigation measures and policies to appropriately manage resident health and safety, anti-social behaviour and a code of conduct. Mandatory compliance with all operational controls will be required by all residents and on-going liaison with UHSC and WSC will be undertaken to ensure open communication and identification of emerging issues. All residents at the TWA Facility will be subject to a Code of Conduct that will be strictly enforced at all times. The Code of Conduct will cover rules regarding alcohol consumption and anti-social behaviour.

f) In regard to safety and medical provision at the TWA facility, a trained first aid professional and first aid kits/facilities will be provided. This is to ensure that employees have immediate health support whilst not adversely affecting community health services. The Proponent expects its workforce to be respectful and considerate of the local community at all times, and this is a requirement of employment conditions. There is zero tolerance for poor behaviour in the local community and this commitment extends to everyone working on the Proponents' projects whether they are local, non-local, direct employees of the Proponent or subcontractor employees. As part of the Project, the Proponent is investigating whether proponents of nearby projects could collaborate to support funding for an additional doctor in Coolah during the peak construction period. As part of the Dundonnell Wind Farm (DDWF) Benefit Sharing Plan (BSP), the Proponent established a 10-year partnership with Lifeline Direct Victoria to support the employment of a Community Awareness and Engagement Coordinator for Lifeline Direct South-West Vic. This is just one example of how the DDWF shared benefits from the project with the region to support health services. Initiatives like this will be explored for the Project.

g) In NSW it is illegal to use agricultural chemicals in a way that could injure people or cause harm to animals, plants or properties that are not the target pest species. It is therefore expected that all landowners are aware of the correct management of chemical spray on their properties. No large-scale spraying of any sort will be required at the TWA Facility. Any grassed areas will be mowed frequently to keep vegetation low to the ground.

h) Access to the wind farm site from the TWA Facility will not require travel through Coolah, so a large increase in traffic at night passing through the township is not expected from the TWA Facility. Intermittent trips into Coolah from individuals from the TWA Facility would generally only occur for purposes such as purchasing goods and services.

i) The Proponent has established a Goods & Services Register, Accommodation Register and database of First Nations businesses and groups in the region. In addition to this, the Proponent works very closely and collaboratively with the local communities to explore and define benefit sharing opportunities, that could be realised during construction and into operations.

The Project will prepare a comprehensive Benefit Sharing Plan for construction which will outline the benefit sharing commitments that are part of the Project once it becomes operational.

As a project connecting to the CWO REZ transmission line, the Project will be required to deliver on employment, business, training and supply chain benefits in the region. The Project and BOP Contractor will work with the local communities to identify opportunities to supply to contractors on the Project, such as hyper-local approaches like sourcing meat locally or local cleaning services, to more direct contracts such as traffic management and machinery hire.
At the Rye Park Wind Farm project in NSW, the Proponent coordinated with the local Boorowa IGA supermarket to establish extended operating hours on certain evenings to ensure the workforce was still able to shop locally.
The Project will also run 'meet the contractor' days before commencement of construction, and will seek to advertise employment and business opportunities in local newspapers like the Coolah Diary and through the Coolah Chamber of Commerce.

j) The wastewater figures used in the assessment are based on rainwater harvesting at the rate of a 1,500 L tank per toilet on site, and using recycled water for toilet flushing, laundry use and drip irrigation (if required). The estimated water use/wastewater figures were based on specialist advice from previous experience with TWA facilities.

3. Waste Impacts

It is noted that the TWA proposes to dispose of general waste, recycling and wastewater at local waste management and recycling facilities.

As previously advised, Council does not will not be accepting waste or process recycling from REZ projects. All waste generated must be removed to an alternative waste management facility outside the Warrumbungle Shire.

Council's sewerage treatment plants do not have capacity to accept additional wastewater generated by REZ projects.

These comments are noted. The Proponent is committed to consulting further with relevant Councils and waste disposal operators to determine an optimal solution for waste disposal. A Waste Management Plan will be developed for the management of waste from the TWA Facility and, where possible, any waste will be collected and recycled through existing recycling centres in the local community. General waste would be managed on-site via waste collection and recycling facilities, and then transported to a licensed landfill facility by an appropriately licensed contractor. Recyclable materials may be accepted at Mudgee Waste Facility, with pre-approval from Mid-Western Regional Council (as per their submission, refer to **Section 4.13**).

It is also noted that the BOP Contractor will need to identify ways to effectively procure goods and manage waste in accordance with the waste hierarchy while meeting merit criteria requirements as part of the CWO REZ connection agreement with EnergyCo.

Wastewater would be collected on site and either treated on-site or removed for treatment at a licensed wastewater treatment facility. The preferred approach is to provide an on-site sewage treatment plant in a modular wastewater treatment solution packaged in a standard shipping container.

A system built into a conventional 40-foot container can achieve the required capacity. Confirmation of wastewater management will be subject to detailed design.

4. Road and Traffic Impacts

On the matter of local roads, as the road's authority under the Roads Act 1993 and related laws, all road works, safety, service criteria and traffic management in connection with the development are required to meet with Council's formal approval prior to starting work.

Based on the location of the proposed TWA, Coolah is likely to experience reduced impact by congestion from light vehicles during peak times, compared to those in Mod-1, however the overall pavement impact is unlikely to change.

It is important to note that Council disagrees with the proposition that much of the workforce will use internal project roads to commute to and from work fronts. To counter numerous light vehicles on the public roads carrying perhaps just a driver, Council supports the use of workforce shuttle buses and requests a commitment by way of appropriate conditions of consent.

By concentrating the movement of light vehicles on local roads between the TWA and work fronts, road safety becomes even more of a concern. Stated in Attachment 1, are Councils requested Conditions of Consent arising from our deliberation of the TWA report.

The rationale for said conditions is to ensure the project proceeds in a way that is consistent with Council's requirements and environmental, social and economic costs for the whole of the TWA construction, operation and decommissioning phases are fully offset.

Consultation with WSC will be conducted as part of the development of the Traffic Management Plan. The trip-origins of workforce light vehicles have been adjusted in the Mod-1 Amendment 2 Report (TWA Facility) based on the location of the proposed TWA Facility. Further mitigations may be considered including use of buses to reduce light vehicle movements once a BOP Contractor is engaged and the effective management of workforce movements can be negotiated in more detail.

Should Mod-1 Amendment 2 (TWA Facility) be approved, the conditions of the Development Consent will be determined by DPHI. Given the TWA Facility is required from the very start of the construction period, to avoid Project delays the Proponent prefers that conditions state that the TWA Facility EMP be prepared in consultation with the Council. Conditions requiring Council approval or agreement on plans may result in material delays which could compromise Project viability. The Proponent has identified WSC as a key stakeholder to be consulted closely moving forward, as per the Stakeholder and Community Engagement Plan (SCEP) developed for the Project.

5. Cumulative Impacts

The TWA report includes limited assessment of the cumulative impacts.

The cumulative impacts of all proposed projects within the CWO-REZ are significant for local communities and are a major, defining matter for Council.

With some 40 energy generation projects plus a major transmission line planned for the REZ, (10 generation and one transmission project in Warrumbungle LGA) Council is very disappointed that identification, assessment and mitigation of cumulative impacts has not been adequately addressed.

Furthermore, this gap in the assessment process is the primary reason why Council has lodged an objection to most REZ projects. Yet our call, and that of Mid-Western Regional Council, goes unanswered.

Council notes that Tilt Renewables has proposed that Council use development contributions paid via the Planning Agreement for local health initiatives, especially in Coolah and Cassilis.

Council will be applying the planning agreement funds to local projects in accordance with the EP&A Act Regulation and following input from affected communities and Tilt Renewables. It is noted that the State Government has primary responsibility via NSW Health for the provision of public health services.

While the Approved Project was one of the first wind farm projects to be approved in the locality, since its approval, and due primarily to the designation of the CWO REZ, an increasing number of renewable energy projects and associated infrastructure projects are currently being progressed. As such, there is now potential for additional cumulative impacts due to interactions between projects. To-date, however, there are no approved or constructed wind farm projects within 50 km of the Project Area. The nearest proposed wind farm is the Valley of the Winds Wind Farm (VOTW) project, being developed by ACEN Australia, located approximately 10 km west of the Liverpool Range Wind Farm. The VOTW project is still progressing through its development application process and as part of that process will need to consider cumulative impacts associated with the construction of the Project.

The addition of the TWA Facility will not materially increase the impacts of the Approved Project and has been proposed to alleviate the potentially significant cumulative impacts to accommodation supply in the region as a result of the development of the CWO REZ. This was previously identified as the key potential cumulative social impact for the Project. Other key benefits of the proposed TWA Facility include:

- improved road safety and reduced potential for driver fatigue through reducing the distance associated with workforce movements by providing accommodation within the vicinity of the Project
- increase in local economic benefits associated with incoming construction workforce utilising facilities and businesses located in proximal towns whilst not impacting local housing stock
- local employment generation leading to additional job opportunities associated with the TWA Facility for local community members.

It is understood that EnergyCo is aiming to limit cumulative impacts on the existing social services and infrastructure in the CWO REZ, including health care, education, justice and emergency services. The Proponent will continue to collaborate with EnergyCo and other NSW Government agencies in relation to the use of social services and initiatives which may minimise the demand on existing services in the region.

6. Update the Planning Agreement

A Planning Agreement for the original LRWF Project was signed on 23 July 2019. That project was not constructed.

Since then, in 2022, a Modification was tabled and subsequently, in 2023, Amendment 1 to the Modification was announced. Then Modification 2 was tabled.

As per provisions in the signed planning agreement, Council requires Tilt Renewables to urgently re-open negotiations with intent to vary the agreement, mindful of changes to the scope and extent of the proposed wind farm.

To be clear to both the Developer and DPHI, it is essential to Council that variations to the planning agreement be secured prior to any contemplation by DPHI or the IPC of issuing a modified development consent.

By way of background:

On 3 July 2023 Council tabled draft Key Terms with the Developer. Council is yet to receive a response.

On 13 October 2023 (a meeting) the Developer advised it was waiting on the "refreshed" Wind Farm Guidelines and the situation regarding Access Fees.

On 23 November 2023 the Developer advised it would address the planning agreement "very early in the new year". Nothing has yet occurred.

The Proponent has commenced negotiations on the VPA with both WSC and UHSC and proposed that it is amended to be generally in line with the Draft Benefit Sharing Guidelines (DPE, 2023).

The Proponent provided a written response to WSC's Key Terms in early March 2024 to both WSC and UHSC, and proposes that the amended VPA is fair and reasonable, ensures lasting legacy benefits are delivered to the local Coolah and Cassilis communities, and provides some decision-making power for the community to determine how Community Enhancement Funds are allocated.

The Proponent is targeting agreement on the terms of the amended VPA in April 2024. Legal drafting and negotiation of the terms and conditions of the amended VPA would commence shortly thereafter.

5.0 Response to Community Submissions

5.1 Economic, Environmental and Social Impacts

5.1.1 Social Impacts

General social impacts

The people of Coolah don't want a bar of it and consider the proposal of a worker's camp on the doorstep of their little hamlet, totally inappropriate. S-67295709

Security camera and security staff should be onsite monitoring any potential or incident. S-67535962

Worker have allotted staff to participate in voluntary services for the community just like any other resident, Volunteering for roles on the RFS, VRA, hospital auxiliary, sporting or community events such as Australia Day, veterans touch, Landcare, riverwalk, lions club, driver reviver etc. S-67535962

Coolah community should have a residual benefit from hosting the TWA; with commitment to provide additional accommodation modules to be retained off private property and for community benefit potentially in crown or council land. S-67535962

I think that you building another town, a similar size to Coolah, within 3km of Coolah isn't very fair to the residents of Coolah. They already have limited services and you expect those services to go around twice as many people! Everyone knows and looks out for each other in small rural communities like Coolah, and with this new "community" being constructed there will be at least 550 new people to the area that don't understand our way of life and stretch our already stretched resources.

Will these households be paying Shire Rates, as all other households in the shire have to?

Rural people are increasingly being disregarded yet expected to bear the overwhelming burden of these projects & the detrimental impacts on our communities, national parks, farmlands, businesses & mental health. I refuse to accept there is nothing we can do going forward & my aim is to seek legal support in establishing a Coolah class action against each & every host of wind project infrastructure for the devastation they wreak on the rest of their community. S-67599464

I object to Tilt's outrageous plague of public health & safety risks from unmonitored, 88 day rotating, 600 x disease ridden, light fingered, immigrant work camp bodies with unmanageable faecal waste & no adequate water. S-67599773

The proposed 600 person labour camp only 3km from the small town of Coolah, population 1290, will be devastating for the town. No town can cope with a 50% increase of people in a short time and not suffer in all sorts of ways, including increased crime, shortages of goods and services, increased cost of services and goods, cultural upheaval, increased litter and wastes of all types, traffic delays and other consequences. S-67607714

The source and type of workers is not specified but in all likelihood they will be predominately single, from overseas on temporary visas, not bound to work for more than a few months before relocating, not be compatible with the local rural and aboriginal culture, and not be familiar with NSW and Federal laws; we can expect a revolving door workforce with the disruption that will bring in the local communities.

How can a local population socially integrate a bigger population than their own without negative consequences? How can they cope with more rubbish, sewage, traffic than is currently the case, which will be created by 50% to many times more than their current population? How can hundreds to thousands of outsiders, probably from cultures quite different to our own, fit in? S-67612708

How many of these workers will have a clearance to work and live around families with children and schools? Will any of these workers have prior assault and child SA offences? How will TILT guarantee safety for the rural/regional communities? S-67616226

Where will the workforce required for TWA construction be housed? S-67609484

During construction of the TWA, where does TILT propose the construction crew reside? There is little to no accommodation available in the area. If they are to be housed on-site, what are the details? S-67603710

Will the Tilt workforce proposed to be housed in the TWA facility use existing community services and/or amenities eg swimming pool? If so, how will Tilt, or construction workers, reimburse the community considering these are funded and maintained through council rates? S-67609484

It is understood that some members of the local community are concerned with the potential negative social impacts of the TWA Facility. A Social Assessment was prepared and included at Appendix M of the Mod-1 Amendment 2 Report (TWA Facility) to identify potential social impacts and opportunities as well as available management and mitigation measures for the proposed TWA Facility.

The Social Assessment recognised the potential impacts of changes to sense of place, community composition, relations and levels of community cohesion due to influx of workforces to small rural communities and proposed a number of mitigation strategies to minimise the social impact. These include:

- demonstration of proactive, thorough and transparent community engagement, throughout the lifespan of the Project via the Stakeholder and Community Engagement Plan (SCEP) (included as Appendix F of the Mod-1 Amendment 2 Report (TWA Facility))
- annual SCEP update based on feedback from stakeholders from the previous year
- provision of on-site food and recreational opportunities at the TWA Facility to reduce the need for the workforce to dominate the local community
- mandatory compliance with a Code of Conduct on respectful behaviour within the TWA Facility and in surrounding towns
- TWA Facility location, design and amenities to encourage workforce to remain on-site for most of their daily needs.

Since lodgement of the Mod-1 Amendment 2 Report (TWA Facility), the Proponent has further investigated the direct and indirect benefits that would come from locating the TWA Facility near Coolah township. These benefits include:

- **Economic growth:** A construction workforce that resides locally, while also being self-contained, can lead to increased local business patronage, at shops, trades, cafes, restaurants and other services.
- **Employment opportunities:** A TWA Facility can open opportunities for members of the local community in roles necessary for the operation of a TWA Facility, such as food and beverage providers, laundry and cleaning, landscaping and maintenance.
- **Reduced local traffic:** With workers staying on-site, there is a reduction in daily commuting traffic on the broader public road network, which lessens the impact on local roads, minimises potential traffic disruptions, and shorter trips can reduce the risk of driver fatigue and vehicle accidents.
- **Legacy infrastructure:** A TWA Facility can provide an opportunity to leave, repurpose or relocate infrastructure that is important to the landholder and the local community once construction has ceased and the construction workforce has demobilised. This could include ground water bores for firefighting purposes, potential water/sewage treatment facilities, and housing for tourism, training or community infrastructure. Wherever required, the relevant approvals would be obtained to leave legacy infrastructure in situ or at nearby alternate locations.

The Proponent is committed to the implementation of mitigation and enhancement approaches to address potential social impacts and aims to become a positive contributor to the communities where it works by sharing the benefits of its projects to support communities over the long term. Benefits are intended to be shared with all affected local communities, not just host landholders and Councils.

The construction of the TWA Facility will require a peak workforce of approximately 40 construction employees. Analysis undertaken for the AEF, prepared as part of the Mod-1 Project, considered historical occupancy rates and the presence of other concurrent projects and concluded that around 100 workers could potentially be housed in existing proximal short-term accommodation without unduly impacting existing tourism and other short-term accommodation users. Thus, there is sufficient capacity in the local short-term accommodation market to house TWA Facility construction employees, if they do not reside locally, until such time as the TWA Facility is able to accommodate them. The priority for the first stage of construction of the TWA Facility will be the establishment of a 'construction camp' with approximately 40 rooms, temporary parking, temporary administration buildings and temporary modules for wastewater treatment, water storage and power generation to house the construction workforce.

The BOP Contractor will implement a Code of Conduct which will clearly outline acceptable and unacceptable behaviours in the workplace and at the TWA Facility. It will ensure all employees are aware of the Code of Conduct and understand the consequences of violating it. Consequences for violating the Code of Conduct may include disciplinary action such as verbal warnings, written warnings, suspension, or termination, depending on the severity of the offence. The BOP Contractor will also explore options for National Police Checks (where applicable) as part of the onboarding process.

Impacts to health and emergency services

Ensure that the provision of essential services for the Coolah and Cassilis communities are not impacted by the Temporary Workforce requiring access and utilisation of such services. Predominantly health and emergency services. The hosting of this TWA Facility should NOT IMPACT on any community member being able to access services that are already quite difficult to access. … On site medical staff and trained first aid and emergency service personnel should be a priority mitigation measure. S-67535957

It is irresponsible that up to 500 workers move to a community with known limited health and safety resources. Construction teams should be self-sufficient medically and be prepared for emergencies - all fully equipped. S-67535959

Will there be medical services on site at the TWA to address any worker illness or accident? Paramedics? Doctors? How will Tilt ensure no burden is placed on existing medical services in local communities – including emergency rooms at local hospitals? S-67609484

Coolah has very limited temporary accommodation, not to mention health and emergency services. Where will you house the workers who are building your TWA? Will you take what little is available for anyone else? Will you expect Coolah to provide your health and emergency services? S-67609490

At the moment locals find it very difficult to see a doctor and our hospital staff and ambulance officers are run off their feet. How will the locals be affected when there is 550 more people in the area? Will we miss out because the Ambulance has been called to a situation at the TWA? Will locals have to wait longer in an emergency because there's not enough nurses and doctors to cope with the extra work load? Will the nurses and doctors leave town because they are too overworked? S-67571963

TILT have not committed to employing a fully equipment medical service at the camp. S-67597213

TILT need to provide permanent trained emergency staff, permanent medical staff (Nurse and Dr) and permanent fire fighting teams in their TWA. AS the TWA is operational 24/7 so should these emergency, medical and fire teams. S-67599459

All the nearby towns already have inadequate services, including no doctor, no hospital, no dentist, limited pharmacies, limited waste disposal facilities, shortages of mechanics and other tradespeople, to name a few. Large numbers of non-resident workers will exacerbate these existing and already deteriorating services. S-67611209

Police: at the moment Coolah is lucky enough to have a police officer in town. This hasn't always been the case and he is often tasked to jobs out of the town/area. Also, obviously, he can't be expected to be on duty 24/7. How can he be expected to look after twice the amount of people once the TWA is constructed? I don't see any plans to have a police officer located within the compound, which is what I think should happen to keep those surrounding people safe. Our Police officers are already stretched thin and will need more support if this project goes ahead. S-67571963

It is ethically and morally irresponsible of TILT to glibly present the Coolah Community with a 600 person TWA without any regard to the lack of rescue, medical or fire services for not only the existing population but the 600 people working for TILT. S-67597213

Likely hood of increased incidences such as accidents requiring medical support; increased offences requiring more police presence (rules should apply to a TWA like any other gathering or event with a ratio per head security provided, first responders, emergency response etc.) S-67535962

Community stakeholders have voiced concerns that the sudden population increase in the area would result in further strain on health and emergency services, noting that the local community already experiences difficulties in accessing such services, with large waiting lists and wait times.

The BOP Contractor will have a key focus on Health and Wellbeing, both in the workplace and at the TWA Facility to promote positive health and reduce the strain on community health services. The TWA Facility will contain gym and recreation facilities to promote an active and social lifestyle. The TWA Facility will promote healthy food choices and the benefits of good nutrition.

The TWA Facility would provide trained first aid professionals and first aid kits/facilities on-site to ensure that employees have immediate health support, to limit strain on existing health care services in the region.

The BOP Contractor would implement a Fitness for Work procedure to ensure workers are at optimal health to perform work. This process intends to have a positive influence on the overall health of workers that utilise the TWA Facility.

The BOP Contractor would also implement an overarching Wellbeing Program, including Mental Health Assistance (EAP), wellbeing tools and resources, and benefits of using the TWA Facilities to improve wellbeing.

However, it is recognised that at times some members of the workforce may still use health or social services within the local or regional social localities outside the TWA Facility. This would include the potential use of hospitals in Dubbo and Mudgee for more specialised or severe injuries and health conditions.

Additional measures that the BOP Contractor will explore include:

- additional medical, health and social services programs to reduce the strain on health services such as Telehealth and/or onsite nurse
- pre-employment medicals for workers to assist in determining if the applicant is physically and mentally fit to perform the duties of the job and to ensure their safety and the safety of others in the workplace.

The BOP Contractor will prepare a Fire Management Plan for the Project, incorporating the TWA Facility, to include all requirements listed in the conditions of consent (refer to **Section 4.10**).

It is understood that EnergyCo is aiming to limit cumulative impacts on the existing social services and infrastructure in the CWO REZ, including health care, education, justice and emergency services. The Proponent will continue to collaborate with EnergyCo and other NSW Government agencies in relation to the use of social services and initiatives which may minimise the demand on existing services in the region.

5.1.2 Waste Management

Where will all the waste that the households of the 550 extra people in the area create go? There isn't a concrete plan for this, and Warrumbungle Shire ratepayers should not have to foot the bill of having their waste facilities filled up with the TWA's household waste. S-67571963

Waste Management p37 our current recycling is overwhelmed. Licenced landfill where is that? S-67535959

Following from what we have come to expect from all 'renewable energy' developers TILT don't detail the licenced landfill, the waste collection and recycling facility, … S-67597213

TILT are only capable of making broad statements about water supply, rubbish removal and waste water treatment. At present the town is barely able to manage the waste from its existing population ... S-67599459

Which waste collection & recycling facility will the TWA utilise? Coolah Waste transfer station can barely manage the waste from existing ratepayers without adding more than half the district population. Where is the licenced landfill facility that will be utilised by this TWA? S 67599464

General waste going to a Licensed landfill, which one is that? Our local landfill is closed and a designated transfer station only. What other poor unfortunate community will be forced to accept our rubbish? S-67605713

Coolah has a waste collection and recycling facility just big enough for its current ratepayers usage. To what licensed landfill will the TWA waste be sent? Where will your wastewater facility be located? You surely don't expect Coolah to add more than half as much again to what they collect from ratepayers. That would be too ridiculous an expectation even for you people. S-67609490

The Proponent is committed to consulting further with relevant Councils and waste disposal operators to determine an optimal solution for waste disposal. As discussed in **Section 4.0**, a Waste Management Plan (WMP) will be developed for the management of waste from the TWA Facility and, where possible, any waste will be collected and recycled through existing recycling centres in the local community. General waste would be managed on-site via waste collection and recycling facilities, and then transported to a licensed landfill facility by an appropriately licensed contractor. Recyclable materials may be accepted at Mudgee Waste Facility, with pre-approval from Mid-Western Regional Council (as per their submission, refer to **Section 4.13**).

It is also noted that the BOP Contractor will need to identify ways to effectively procure goods and manage waste in accordance with the waste hierarchy while meeting merit criteria requirements as part of the CWO REZ connection agreement with EnergyCo.

5.1.3 Traffic and Transport

Transport and roads should be enhanced and improved to minimise risk of local or worker deaths. Our roads barely cope with local traffic; it is obvious to double the use and without enhancing road capacity is negligent; both the government and proponent is being now put on notice that any road death or injury will be blood on their hands and conscience if they fail to improve roads and pedestrians pathways. Additionally, options by the proponent should compulsory to minimise the traffic by providing shuttles or car pooling for workers. S 67535962

TILT have not committed to a shuttle bus for workers. Fatigue; increased traffic; unfamiliarity with roads; collision with wildlife, feral pigs, wandering stock; all represent a potential for increased fatalities on our roads. This community does not have the rescue or medical services to cope with any increase in accidents. S-67597213

The huge increase in traffic movements along Vinegaroy Rd of 1000+ per day will make this road dangerous for locals and farmers.

The workers camp should be located more centrally within the project boundary. Internal roads could be built by the developer. This would minimize traffic congestion and other detrimental impacts on Coolah, surrounding residents and public roads. The land hosts at the geographic centre of the project who want the project to go ahead would likely be prepared to facilitate this option as it would be a much better outcome for Coolah and the community. It also makes much more sense logistically for the project for workers to be centralized rather than hauling workers from one end of the project to the other. S-67597707

Recreation is an important part of any community, And considerations be planned for and left for the community ie;- a cycle and pathway to TWA site and along the Coolah creek road to Gundare road circuit - it was once a bicycle event

…

It should be highly noted by the Wind Farm Proponent and the Local Warrumbungle Shire Council, that roads must be significantly enhanced to minimise the risk of local or worker injuries and/or deaths. It would be highly negligent if roads are not widened and significantly improved to handle the extra heavy traffic volume activities. S-67604211

As an ageing resident who drives regularly along Vinegaroy Rd, I feel that driving to Coolah will become very dangerous with an extra thousand traffic movements each day. Why can't the temporary workers camp be located internally in the middle of the project, instead of taking so many extra vehicles along Vinegaroy Rd? S-67599206

Adding over 1000 daily traffic movements (TILT project alone) onto Vinegaroy Road is ridiculous. Traffic movements should be restricted to within the boundary of the project. The additional risks to local and worker traffic will undoubtedly result in fatalities. S-67599459

TILT must supply shuttle buses to ferry workers to & from the Worker's Camp. Vinegaroy Road is a main access road to Coolah, the timely delivery of freight, the transport of livestock & grain along with the local residents access to the road to go about their daily activity will be compromised by the additional 1000 vehicles on this road daily. S-67599464

I'm concerned about the extra amount of traffic specifically between the intersections of Coolah Creek Road and Rotherwood Road which will increase the potential for traffic accidents. As locals, we are used to the risks of kangaroos, pigs, deer and livestock on our roads however are these workers? I feel those who aren't familiar with our area will be at greater risk of accidents. A shuttle bus service provided by TILT is a necessity.. plus wouldn't reducing the amount of vehicles used be environmentally friendly!!!? S-67599754

How many heavy vehicle loads will be required to transport the modular manufactured buildings to the site? And for decommissioning? What is the proposed transport route? S-67609484

The introduction of the TWA Facility will provide improvements to the Project from a traffic and transport perspective.

The introduction of the TWA Facility does not materially change the number of vehicles movements estimated for the overall Project however, there will be a redistribution of the workforce light vehicle trip-origins and movements. This influences the number and type of turning movements and the required turn treatments at relevant intersections along Vinegaroy Road, and these are described in Section 4.2 of the Update to the Addendum Traffic Impact Assessment: Temporary Workforce Accommodation Facility (CSPL,

2024) (refer to **Appendix 4**). The location of the TWA Facility, on the western edge of the Site Boundary, is relatively central in terms of travel distances to wind turbines in the north, south and east of the Project and workers will be able to access parts of the Project internally (particularly wind turbines in Cluster D), directly from the TWA Facility (i.e., without returning to Vinegaroy Road).

Based on the current construction program and traffic estimates, the intersection analysis determined that basic right (BAR) and basic left (BAL) turn intersection treatments are required at all intersection locations off Vinegaroy Road. Further intersection analysis and consultation with the relevant road authorities will be required once a BOP Contractor has been engaged and detailed construction scheduling has been refined further.

The inclusion of the TWA Facility at the proposed location is expected to result in a number of benefits from a traffic and transport perspective, including:

- Uses an existing/planned Site Access Point (SAP) – the TWA Facility proposes to utilise an existing driveway to the property and portion of access track where SAP ID#113/114 is proposed as part of the Project to provide access to the D-Cluster of wind turbines. The proposed SAP was previously assessed and achieves minimum safe sight distances.
- Road safety, and in particular driver fatigue, will be improved on the wider road network with shorter commutes for workers between the wind farm work fronts and the TWA Facility compared to travelling from home or other accommodation nearer to large regional centres like Dubbo and Tamworth and beyond.
- Reduced congestion during peak times, by not having two-thirds of the construction workforce accessing the Project site via the Golden Highway/Vinegaroy Road intersection which exhibits significantly higher existing traffic volumes compared to the local roads.

A Traffic Management Plan (TMP) will be developed for the Project (including the TWA Facility), in consultation with government agencies and Councils, and further traffic mitigation measures may be considered including the use of buses to reduce light vehicle movements. This will occur once a BOP Contractor is engaged and the effective management of workforce movements can be negotiated in more detail.

It is also noted that the Proponent has previously committed to undertake road upgrades on Vinegaroy Road as part of the overall Project and these include widening and strengthening of pavement, and upgrade of creek crossings, bridges and causeways prior to commencing its use for any over-dimensional or heavy vehicle traffic, wherever required. The suite of upgrades and repairs have been determined in consultation with local Councils and are detailed further in the Supplementary TIA prepared for Mod-1 Amendment 1 (RTS Project) is available on the NSW Major Projects Portal website. [3]

[3] https://www.planningportal.nsw.gov.au/major-projects/projects/mod-1-turbine-and-infrastructure-changes

5.1.4 Impacts on Water Resources

Water sourcing

As indicated by the applicant there is 10,000ML available for trading, which indicates that the water allocation is currently under-utilised. Given this, I believe ongoing monitoring of the groundwater source area, total water utilised vs allocated, and cumulative usage/impacts (from all other projects and uses) is important and should be a required condition. S-67535957

Water for the farmers or community should not be impeded by the TWA - Coolah township suffers poor water quality and the proponent could enable better access to the Sydney water basin through it bore holes drilling for the TWA given to the local council WSC. S 67535962

Following from what we have come to expect from all 'renewable energy' developers TILT don't detail … what happens to the "generally" plentiful ground water source during a drought or dry season. S-67597213

Coolah community should have a benefit from hosting of the TWA; I would strongly suggest that the water bore that has been sunk on private land, the owners … who are hosting the Camp, that this bore be retained as the main water souse for Coolah after the man camp is dismantled, and the Wind Farm proponent (Tilt) provide the funding to Warrumbungle Council for the delivery of this Water to Coolah Township. This water comes from the Sydney Basin and is of much higher quality water then the existing water supply. S-67597969

TILT state that ground water is "generally" plentiful at the site. Plentiful groundwater is never guaranteed during dry seasons or drought. S 67599464

Can Tilt Renewables guarantee no bore in the district will have its water level drop, or go dry, during construction and operation of the TWA facility? What will Tilt Renewables do for any landowner who does not have adequate stock and domestic water due to extra water use in the district? S-67609484

As discussed in **Section 4.4.2**, a groundwater monitoring bore (BLR-4393) (ARDG, Works Approval 80WA001705) near the TWA Facility within the Site Boundary has been identified to provide the required water for both construction and potable water for the TWA Facility. It is not currently proposed to utilise any water resources under the control/management of any local Council to supply the TWA Facility, nor to engage the services of water carting suppliers.

As further detailed in **Appendix 6**, pump testing of the bore at a constant rate of 5 L/s over 72-hours indicated very high recharge rates associated with a large groundwater resource. The extraction rate undertaken for the pump test (approximately 432 kL/day) is significantly higher than the predicted peak water demand for the TWA facility (approximately 75 kL/day). This level of extraction would not need to be maintained on a permanent basis over the operational period of the TWA facility. Instead, only intermittent pumping would be needed to maintain adequate supply levels in storage tanks. Data from this test will be used to support an application to WaterNSW for a water supply work approval.

Use of this bore to supply potable water for the TWA Facility may require some treatment through a small-scale plant. Testing of samples from this bore is currently underway to determine the level of treatment that may be required.

The Proponent is implementing a comprehensive groundwater investigation strategy for the Project that has identified multiple groundwater sources in and around the Project Site Boundary that could supply construction water to the TWA Facility, in the unlikely event that the bore (BLR-4393) is not granted approval for conversion to a production bore.

Subject to authority approvals, stormwater runoff from buildings may be harvested and reused on site at the TWA Facility for laundry and/or irrigation. Site stormwater runoff would typically be directed to stormwater detention pits (or tanks) from where it would be slowly released into the existing stormwater

system. The stormwater management system design would not adversely affect any adjoining properties or alter the current status of discharge and would be subject to authority approval and detailed specialist engineering design.

Additionally, further consultation has been undertaken with neighbouring property owners around the TWA Facility to discuss their concerns regarding the potential impact of groundwater use at the TWA Facility on local groundwater resources. The Proponent has committed to undertaking baseline bore pump tests where requested at relevant neighbouring properties to help address their concerns.

Wastewater/Sewage

Sewage? Not even rates a mention REALLY? Be aware that septic tanks pop up in black soil after rain. S-67535959

There is no mention of sewage disposal within the report. What are you Going to do, bring in a hundred portaloos and empty and service them daily? I think not. For a work camp the size proposed, an OSSMS plant will need to be established, disinfection and aeration will need to be employed in a reticulated sewerage system with either a pump out reservoir or an Irrigation system covering 10 hectares or more. Black Soil adsorption rates in the Coolah District have long shown (From Bolus Ribbon Testing) poor adsorption rates as the reactive nature of the Soil packs down into a clay pan like layer in dry times. The spray irrigation of Effluent onto cropping will have varied results with adsorption rates as the chemical composition of the soil molecules to which the effluent will adhere will alter significantly with local conditions, especially in times of downpour and floods. It has been established that, Effluent over time will descend below its assigned absorption area as the area reaches it capacity to process. The effluent will form its own membrane that will follow a claypan until it reaches a Weak point and breaks through to the water table. At any point where flood water comes into contact with the membrane the effluent becomes a major contaminant component. A flood contour levy could be necessary below the irrigation application area as the TWA area is within a known floodwater catchment area. S-67605713

As discussed in **Section 4.4.3**, wastewater would be collected on site and either treated on-site or removed for treatment at a licensed wastewater treatment facility. The preferred approach is to provide an on-site sewage treatment plant in a modular wastewater treatment solution packaged in a standard shipping container. A system built into a conventional 40-foot container can achieve the required capacity and there is sufficient space on site to accommodate this. Confirmation of wastewater management will be subject to detailed design and any on-site treatment systems would be designed in accordance with relevant regulations and guidelines, in consultation with Warrumbungle Shire Council.

Flooding

In my estimation, I would not even build a chook shed on that area if I did not want to lose it in the first downpour though you are happy the majority of the site is not subject to the mapped 1% AEP flood modelling. Appropriately designed suggest building on stilts! Though unless they are hammered in and stabilized with concrete, they will move around. S-67535959

As outlined in the Mod-1 Amendment 2 Report (TWA Facility), the majority of the TWA Facility site is not subject to the mapped 1% Annual Exceedance Probability (AEP) flood zones determined through flood modelling undertaken for the Project. The TWA Facility will be appropriately designed and sited to address relevant flooding risks. Site-specific soil and geotechnical investigations will be completed at the detailed design phase for the development, however preliminary studies have confirmed that the site is suitable for the proposed TWA Facility.

5.1.5 Visual

The TWA should not impede our rural setting and we as a community have right to retain our rural scenery solutions for compulsory Screening of the camp with mature trees be installed. S-67535962

The town of Coolah is being forced to look at hundreds of turbines from numerous angles and now to be faced with a TWA that is larger than the town itself is unacceptable. TILT should be forced to relocate the TWA amongst the land hosts who are so keen to host the infrastructure and remove further visual/sound amenity impacts from the town. S-67597213

The NSW Land & Environment Court recently dismissed a developers appeal to construct a renewable energy project because it would compromise the aesthetics of the rural backdrop that the applicant's modified strategies to mitigate the visual impact relied on uncharacteristic landscaping which their local Council contended would be an alien feature within the existing setting. This should also be applied to the proposed construction of the alien feature that would be the Worker's Camp located on a low-lying site within the visually sensitive landscape setting of the Coolah Valley.

This worker's camp will add to the visual pollution that comes with wind turbine projects. Accordingly, all the non-associated neighbours should be offered compensation for their loss of visual amenity in what is now a quiet, rural, scenic environment. S-67599464

Visual Impact Assessment states that "if required upon fieldwork ground truthing, there is opportunity to incorporate screen planting to reduce the potential visual impact from the TWA". Any screen planting should be planted 20 years prior to construction for any benefit to be seen by neighbouring residents. Who will plant and care for proposed plantings? Who will replace any dead plantings? S-67609484

A comprehensive assessment of potential visual impact was undertaken for the TWA Facility, as an Addendum to the Visual Impact Assessment (VIA) prepared for the Modified Project (refer to Appendix K of the Mod-1 Amendment 2 Report (TWA Facility)). The VIA Addendum included the assessment of both the existing landscape character of the TWA Facility site and its surrounds and the potential visibility of the TWA Facility. The assessment was based on photographic survey undertaken during a site visit in August 2023 by Moir Landscape Architecture.

The assessment established a Zone of Visual Influence (ZVI) for the TWA Facility which indicated partial visibility to varying levels from parts of Vinegaroy Road, particularly to the south-east and to the town of Coolah to the east, although vegetation and built form is likely to assist in screening views. The ZVI findings from both public and private viewing points concluded that the proposed TWA Facility could be constructed and operated while maintaining the core landscape character of the area and have a minimal impact on the surrounding visual landscape.

A number of mitigation measures to address potential visual impacts, in addition to the use of screen planting, were described in Section 6.6.3 of the Mod-1 Amendment 2 Report (TWA Facility), including:

- Where possible, use building materials with a recessive colour palette which blends into the existing landscape and reduces contrast. The type and colour of building materials used will be determined during the detailed design phase.
- Unnecessary lighting, signage on fences and logos will be avoided.
- All new fixed lighting associated with the TWA Facility (operational lighting and security lighting) will be installed and maintained in accordance with the *Australian Standard AS4282 – 1995 – Control of Obtrusive Effects of Outdoor Lighting* and the *Dark Sky Planning Guideline* (DPE, 2023).
- Any proposed buildings will be sympathetic to the existing architectural elements in the landscape.

In those circumstances where dwellings were found to be subject to a high level of visual impact, screen planting was proposed as an option to assist in mitigating views of the TWA Facility from individual residential properties. If required, upon fieldwork ground truthing, opportunities to incorporate screen planting would be further investigated in consultation with the affected landowners.

It is noted that the TWA Facility would be a temporary addition to the landscape, for the duration of the construction of the wind farm only (approximately four years), and after that time would be decommissioned and all land rehabilitated and returned to its current condition and land use.

5.1.6 Biodiversity/Biosecurity

TILT is requesting that Biodiversity Development Assessment [BDA] requirements need to be waived for the TWA. The location of the TWA necessitates road & intersection upgrades, these 'upgrades' will undoubtedly require extensive land clearing. DPE should not waive the need for a BDA given the impacts of extensive land clearing. S-67599464

I object to Tilt's biodiversity hazardous plans to irresponsibly & carelessly introduce all manner of biosecurity risks - potentially FMD the next pandemic, fire ants & goodness knows what else! S-67599773

With the proposed workers sites and at least an extra 4100 workers, this brings significant biosecurity risks to the area. How many of these workers will be on visas? International workers bring the risk of FMD to not only Australia, but our region. We as a nation and community cannot risk this. International workers will be slack on their bio security measures, and as such, expose our communities to risks. They simply will not understand the importance of such measures. Who will be held responsible and accountable for such bio security issues? S-67616226

TILT is requesting that BDAR requirements need to be waived for the TWA. The location of the TWA is necessitating road and intersection upgrades, these 'upgrades' will undoubtedly require extensive land clearing. TILT already have approval to clear large tracts of land. E.g. Approval to clear approx 260hs of the critically endangered Swift Parrot habitat, and 250ha of the Regent Honeyeaters habitat. The DPE should not waive the need for a BDAR given the extensive land clearing required for roads. Too much land has already been sacrificed, threatening vulnerable, endangered, & critically endangered wildlife. S-67616956

An Addendum to the BDAR has been prepared to include the ground disturbance associated with the TWA Facility. The Addendum to the BDAR also includes additional documentation of measures to avoid and minimise impacts on Box Gum Woodland CEEC, and quantification of additional and appropriate measures to be implemented and is included as **Appendix 3**.

As previously described in **Section 4.5**, the Proponent will implement biosecurity controls for the overall Project (including the TWA Facility) which will be ongoing throughout construction, operation and decommissioning phases. With the proposed controls in place and with a focus on becoming a positive and long-term member of the communities in which it operates, the Proponent is aware of the need to appropriately manage pests, weeds and biosecurity as part of implementing the Project. The Proponent is focussed on being a good neighbour and will respond in a timely manner to any weed or pest issues/risks that arise and will continue to liaise with neighbours to the Project regarding any feedback or issues they may identify.

As described in **Section 4.5** above, a Biosecurity Management Plan (as part of the Project-wide Biodiversity Management Plan) would be prepared to include additional measures to reduce biosecurity risks of the Project, which will include the following in relation to the operation of the TWA Facility:

- provision of boundary stock fencing where the TWA is adjacent to agricultural areas

- limiting the number of TWA Facility site access points and using signage to direct site visitors to designated parking or reception areas
- use of a visitor register
- limiting vehicle access from the TWA Facility to agricultural areas on surrounding properties
- implementing a feral animal control program which includes protocols for waste storage and removal, and active monitoring and surveillance.

Mitigation measures will be finalised through the preparation and approval of the Biodiversity Management Plan as per the relevant approval conditions.

5.1.7 Cumulative Impacts

Cumulative impacts on Coolah with progressive developments in the district, consideration given to ongoing renewable energy projects how this could best be managed ie; extending this TWA for other projects nearby. S-67535962

Tilt continues to avoid any mention of cumulative impact. … The immediate area is facing a 600 person TWA camp at Coolah (TILT), a 1500 person camp at Merotherie (Energy Co/ACE), a 1000 person camp at Birriwa (ACEN), a 600 person camp at Cassilis (Ulan Road/Neeley's Lane – Energy Co) and a 400 person camp at between Leadville and Coolah (ACEN). Likely there are many more that we have not yet been informed of.

These camps (within a radius of less than 40 km) will likely overlap in operation and we can anticipate 4100 additional workers coming into the local district. S-67597213

Cumulative impacts on are a known and are a measurable impact, resulting from these types of progressive developments on Coolah and the district, consideration given to ongoing renewable energy projects how this could best be managed ie; extending this TWA for other projects nearby. S-67597969

There are Temporary Workers Accommodation camps proposed within 40 km of Coolah that are planned to house over 4100 workers. S-67599459

The cumulative impact of an estimated 7,500 workers in multiple labour camps near the towns around Gulgong (pop. 2680), Coolah (Pop. 1290), Cassilis (Pop. 278) and Dunedoo (Pop. 2021) is unreasonable, unacceptable, dangerous, destructive for years, will overwhelm waste disposal facilities, add costs for ratepayers, and deter new resident workers and deter visitors and tourists. S-67607714

A workers' camp of 600 people is too much of an imposition on the townspeople of the eastern part of the CWO-REZ. Together, with the already announced multiple workers' camps near the towns of Gulgong, Dunedoo, and Coolah, the potential total, according the MWRC, is 7500 workers. This is far greater than the populations of the towns mentioned. This is unsustainable. S-67612708

As discussed in **Section 4.15** above, while the Approved Project was one of the first wind farms to be approved in the locality, since its approval, and due primarily to the designation of the CWO REZ, an increasing number of renewable energy projects and associated infrastructure projects are currently being progressed. As such, there is now potential for additional cumulative impacts due to interactions between projects. To date, however, there are no approved or constructed wind farm projects within 50 km of the Project. The nearest proposed wind farm is the Valley of the Winds Wind Farm (VOTW) project, being developed by ACEN Australia, located approximately 10 km west of the Liverpool Range Wind Farm. The VOTW project is still progressing through its development application process and as part of that process will need to consider cumulative impacts associated with the construction of the Project.

The addition of the TWA Facility will not materially increase the impacts of the Approved Project and has been proposed to alleviate the potentially significant cumulative impacts to accommodation supply in the

region as a result of the development of the CWO REZ. This was previously identified as the key potential cumulative social impact for the Project. Other key benefits of the proposed TWA Facility include:

- improved road safety and reduced potential for driver fatigue through reducing the distance associated with workforce movements by providing accommodation within the vicinity of the Project
- increase in local economic benefits associated with incoming construction workforce utilising facilities and businesses located in proximal towns whilst not impacting local housing stock
- local employment generation leading to additional job opportunities associated with the TWA Facility for local community members.

It is understood that EnergyCo is aiming to limit cumulative impacts on the existing social services and infrastructure in the CWO REZ, including health care, education, justice and emergency services. The Proponent will continue to collaborate with EnergyCo and other NSW Government agencies in relation to the use of social services and initiatives which may minimise the demand on existing services in the region.

5.1.8 Decommissioning and Rehabilitation

Decommissioning should be factored and planned and funded by proponent. S 67535962

With regard to the decommissioning of the project, TILT are cunningly describing this block as currently used for grazing cattle. Has there been a history of use of this land for cropping? Local information says it has. During the decommissioning will the cement, pipes and electrical cabling be removed and will the land ever be able to be used (again) for cropping? S-67597213

A concern that the Proponent claims the camp is temporary for 4 years, but the door has left open to permanently leave/repurpose the facility. Just as likely as it is for the wind turbines, is it really intended to not remove all the camp infrastructure at life's end? S-67612708

The decommissioning section appears vague. At the end of the construction period (estimated around 4 years) can TILT and the landowner extend the use of facility for another project developer? S-67603710

Commitments regarding decommissioning and rehabilitation of the TWA Facility would be subject to both the requirements of the final landowner agreement and the rehabilitation requirements of any development consent for the Project. However, at a minimum, the site would be rehabilitated to a safe, stable and non-polluting landform that restores the land capability of the previous land use.

It is noted that the TWA Facility is proposed to be located on private property therefore any decisions about the future use of the land after decommissioning would be made by the landowner.

It is not proposed as part of the Mod-1 Amendment 2 (TWA Facility) to repurpose or convert the TWA Facility to a permanent facility or allow it to be retained for a different use following the completion of construction of the Project. A number of community submissions received during the exhibition period raised the possibility of some infrastructure being retained (either on site or within the local community) once wind farm construction has ceased and the construction workforce has been demobilised. This could include groundwater bores, potential water/sewage treatment facilities and/or modular buildings. Should this be considered in the future, an agreed alternative use would need to be approved by any affected landowner(s) and the appropriate government agencies. The Proponent intends to engage with the community towards the end of construction to understand what is important for the community and what legacy infrastructure could be repurposed or converted.

5.1.9 Energy Use

Given that the consumers of NSW are fast losing access to an affordable and reliable electricity grid, DPE should insist that no TWA is allowed to access the existing grid. This TILT TWA and all further TWA camps should be run solely on solar, batteries with diesel generators for back up only. TILT should invite a university study to examine the results of living with 'renewable' energy. S-67597213

TILT TWA should not require an upgrade to the electrical infrastructure to use grid electricity. The proposed TWA provides an excellent opportunity for TILT to establish an off-grid camp to demonstrate the success of living with renewables. TILT should be mandated to run this camp on solar & batteries with diesel generators for backup only. Putting extra strain on our existing power grid is unacceptable, irresponsible & hypocritical. S 67599464

I find it hilarious that the workers camp requires an upgrade to the electrical infrastructure to use grid electricity!! This is a prime opportunity for our renewable lovers to demonstrate how they can run their camp on solar power and batteries! S-67599754

The labour camp will rely on fossil fuel to provide energy to the camp from either backup generators or from the mainly fossil fueled NEM. S-67607714

Firstly, do you intend to build and run this camp using solely "renewable" energy? If not, why not? S-67609490

The temporary nature and short timeframe of the TWA Facility prohibits the large-scale use of renewable energy and the site is currently serviced by existing electricity infrastructure. Upgrades to the distribution network will be undertaken if determined necessary by service providers.

5.1.10 Impacts to Soil and Land Capability

Black soil again with high risk of erosion and inaccessibility after any rain. … Google -Black cotton soils also called Regur soils are generally clayey, deep and impermeable. These soils expand and become sticky during rainy season and contract during the dry season causing deep cracks into the soil. Local homes have to be regularly restumped and doors never close or won't open. S-67535959

Given the land is black soil thus inaccessible after rain and the area is highly likely to be subject to flooding from the adjacent two tributaries, can TILT please detail the amount of stabilisation required and the cost of restoring this land after 4 years to its previous capabilities. S-67597213

Site-specific soil and geotechnical investigations will be completed at the detailed design phase for the development, however preliminary studies for the Project have confirmed that the site is suitable for the proposed TWA Facility.

Prior to the commencement of site works, appropriate drainage and erosion and sediment controls will be designed, installed and maintained in accordance with *Managing Urban Stormwater - Soils and Construction Volume 1* (Landcom, 2004) and *Managing Urban Stormwater – Soils and Construction Volume 2C Unsealed Roads* (DECC, 2008).

As discussed in **Section 5.1.8** above, commitments regarding decommissioning and rehabilitation of the TWA Facility would be subject to both the requirements of the final landowner agreement and the rehabilitation requirements of any development consent for the Project. However, at a minimum, the site would be rehabilitated to a safe, stable and non-polluting landform that restores the land capability of the previous land use.

It is noted that the TWA Facility is proposed to be located on private property therefore any decisions about the future use of the land after decommissioning would be made by the landowner.

5.1.11 Bushfire Management

The design and planning of the TWA Facility to ensure that there will be sufficient independent emergency resources, should an emergency occur eg. Bushfire/grassfire/emergency requiring whole of TWA Facility evacuation. SO as not to drain existing community emergency service resources in the event of a considerable emergency eg. Sir Ivan Fire 2017. S-67535957

What happens if a fire breaks out in or nearby to the TWA? You have very stationary plans for fire fighting, but fires move!!! Will you be relying on the already stretched local RFS volunteers? Note the 2017 Sir Ivan Fire impacted the area only mere kilometres from the compound. Also, there will be no aerial fire fighting support because of the nearby turbines, having 47 less turbines won't change this fact! S-67571963

TILT have not committed to teams specifically employed to provide fire and rescue services. Relying on the existing depleted number of volunteers in the community is unacceptable. S-67597213

The reports outlining the Emergency Services response strategies talk of Fire Suppression strategies along a Fire Rescue plan recommended to be developed. Where are the documents outlining the parameters to use in such a plan? Where are the RFS responses (they are the responders after all, to bushfire events no matter how they are created) The reports don't discuss the most crucial elements of emergency services capacity to respond; The availability of local services personnel to respond. There is no mention in the reports outlining the status of Local emergency services and their capacity to respond to a significantly heightened district population and construction industry due to the proposed wind farms and their TWA's. Our local emergency services in Fire Rescue (also Hazmat) and the VRA are General Land and RCR accredited. The discussions haven't been held at a local level as to ascertain any problems our crews may be facing. A temporary accommodation facility to house 500 people is to be built within two K of the town boundary, are you telling us you expect the local crews to absorb the social consequences of a population increase of 50% and their associated services needs without you having given any thought to how they might do it? S-67605713

Will TILT provide their own fire fighting departments specifically for both project sites and accommodation sites? This cannot he expected if local communities. S-67616226

"Dedicated on site firefighting water supply, the volume to be determined during the detailed design phase. Provision of connection suitable for firefighting purposes located within the facility (65mm Storz)." Tilt needs to be self sufficient in the case of an emergency, not reliant on the existing emergency services including RFS or Fire & Rescue. During a bushfire where will the workers evacuate to? How will Tilt employees adequately defend the facility? S-67609484

The Proponent is committed to ensuring compliance of the TWA Facility with all NSW Rural Fire Service (RFS) requirements in conditions of development consent, as discussed in **Section 4.10** above.

All buildings will have emergency lighting, smoke alarms and firefighting capability in accordance with the Building Code of Australia. Appropriate firefighting equipment will be installed (portable fire extinguishers/fixed fire hose reels/fire hydrant systems and water tanks). Implementation will be subject to detailed specialist consultant design. Emergency evacuation and emergency assembly points will be established throughout the site as required. The siting of the TWA Facility can accommodate Asset Protection Zones (APZs) in excess of the minimum requirement under Planning for Bushfire Protection (RFS, 2019) in relation to all boundaries. The APZ's will be established during the construction phase and will continue to be maintained over the life of the TWA Facility.

The Proponent and BOP Contractor will prepare a Fire Management Plan for the Project, which will include the TWA Facility, to include all requirements listed in the conditions of consent. This plan will include clear and adequate controls to mitigate fire risk.

5.1.12 Noise

> *This camp will be surrounded by non-consenting neighbours, whose quiet, rural lifestyle will be destroyed by having a large community of strangers dumped in their midst, with all the accompanying noise* ... S-67609490
>
> *In order to minimise the visual and sound pollution for the residents of Coolah the TWA should be located deep within the project.* S-67599459
>
> *What evidence have TILT supplied that non associated homes within the 2 km "buffer zone" have been appropriately compensated for loss of amenity and right to live in their peaceful rural residences.* S-67597213

A Noise Assessment was prepared for the TWA Facility by Sonus Pty Ltd (Sonus) and was included as Appendix G to the Mod-1 Amendment 2 Report (TWA Facility). The assessment considered noise from the construction, operation and decommissioning of the TWA Facility as well as noise from traffic on public roads generated by the TWA Facility during the construction phase of the Project.

Construction noise was assessed in accordance with the NSW *Interim Construction Noise Guideline* (ICNG) (DECC, 2009) which provides an emphasis on implementing 'feasible and reasonable' noise reduction measures and does not set mandatory noise criteria, but rather 'management levels' based on the existing background noise environment.

During the short-term construction and decommissioning periods for the TWA Facility, noise management levels are predicted to be exceeded at up to seven non-associated residences in the absence of mitigation and therefore, in line with the ICNG, the Proponent has committed to the implementation of feasible and reasonable work practices and mitigation measures to minimise any noise impacts. This may include measures such as:

- Screening equipment particularly in the south-west and north-west directions, to minimise noise emissions towards the affected receivers.
- Installing broadband or 'white noise' reversing alarms (in lieu of tonal reversing alarms) on all site-based equipment.
- Arranging the site such that equipment can operate with a forward-in/forward-out movement to minimise the need for reversing to occur (and as such minimise the use of reversing alarms).
- Shutting down equipment when it is not in use to avoid periods of excessive idling.

No financial or other in-kind compensation is applicable to these residences due to construction noise from the TWA Facility.

During operation of the TWA Facility, noise levels at all non-associated residences are predicted to achieve noise management levels.

Similarly, road traffic noise associated with the TWA Facility was also predicted by the Sonus report to achieve criteria determined in accordance with the *NSW Road Noise Policy* (DECCW NSW, 2011).

Visual impacts are discussed in **Section 5.1.5**.

5.1.13 Economic Impacts

NO Community Benefit Fund money should be utilised to bolster essential services for the community, if they need bolstering to aid in the continuation of such services due to the increased demand imposed by the TWA Facility, this should be funded by the applicant as part of the successful delivery of the TWA Facility and not be taken out of any Community Benefit Fund. S-67535957

Compensation for the TWA HOST community Coolah verses Cassilis; compensation for the neighbours. S 67535962

We keep getting told that the TWA will bring money into the town by utilising our shops and services, but what will the workers need to come into Coolah for? They have planned a kitchen and dining facilities on site as well as recreational facilities. There will be no need for these people to come to Coolah to the supermarket, bakery, servo's, use the sporting grounds or spend money in the town. So for 4 years we, the locals, are expected to share our necessities (Emergency services, roads, telecommunications, water) with people who, probably, will add very little to our town. S-67571963

The Proponent is committed to sharing project benefits with the communities in which it operates. A tailored Benefit Sharing Plan (BSP) is being prepared for the Project to endeavour to ensure that the immediate communities directly benefit from the presence of the Project in their communities and to contribute towards broader public benefits and economic development that address the needs of the region throughout the lifecycle of the Project. The BSP will also seek to build on strategic opportunities to drive local innovation and create a legacy beyond the immediate benefits of the Project. The BSP will be prepared in consultation with the Community Consultative Committee, the Coolah and Cassilis District Development Groups and the Coolah Chamber of Commerce, First Nations stakeholders including Walhallow and Gilgandra Local Aboriginal Land Councils (LALCs), along with broad consultation with the overall community, in order to identify areas of need and opportunities.

As discussed in **Section 5.1.1** above, research has shown that a construction workforce that resides locally, while also being self-contained in a TWA Facility, can lead to increased local business patronage, at shops, trades, cafes, restaurants and other services. A TWA Facility can also open opportunities for members of the local community in roles necessary for its operation, such as food and beverage providers, laundry and cleaning, landscaping and maintenance. It is also noted that the BOP Contractor will need to identify ways to effectively procure goods and services in accordance with the merit criteria requirements as part of the CWO REZ connection agreement with EnergyCo.

5.1.14 Telecommunications

It's stated that telecommunications will be provided through the mobile network, how will that network cope with an extra 550+ people using it? It already gets jammed with the amount of people using it now. Do the locals just have to grin and bear the reduced mobile network? Why should they suffer? What happens if there's an emergency and triple 0 can't be called because theres too many people trying to utilise the network? S-67571963

How will current telecommunication services cater for the extra population? Any possible upgrades must be installed prior to any construction workers entering the area. S-67609484

In the Electromagnetic Interference Study undertaken as part of the Modification 1 (Mod-1 Project) assessments, WSP assessed the existing mobile reception in the vicinity of the Project from three mobile providers (Telstra, Optus and Vodafone). It was observed, based on current coverage at the time (2021), that mobile reception was either marginal, or non-existent within and surrounding the Project site.

The Proponent will consult with EnergyCo and telecommunications providers to investigate a strategy which ensures adequate communication channels for the TWA Facility and the Project.

5.2 Issues Beyond the Scope of the Amendment

5.2.1 Liverpool Range Wind Farm

I am concerned about the lack of detail and acknowledgement of the Glossy Black Cockatoo (yellow) noted as a venerable species. Concerned a correct study has not been complete over 12month period including the seasonal movements. … The turbines will be in their feeding ground and their sheltered ground. They will be at high risk of strike. There will be a reduction of habitat for them to feed and shelter. S-67228971

I will guess that most of the latest micrositing locations exceed those approved by more than the allowed 100 metres. In Modification 1, V2, they don't tell us those distances as they did in Modification 1, V1. I calculated a few. For instance, Turbine A18 was 1030 metres from its approved position in M1V1, but is now 1023 metres in M1V2. (Macrositing?) S-67295706

The community is aware that at no stage should this project have been processed through DPE as a modification, the considerable changes to the originally approved project should have required TILT to lodge a new application. S-67597213

"Tilt Renewables are also proposing a project-specific quarry to supply resources to construct the Project which is subject to a separate assessment and approval process." Please outline the separate assessment and approval process and provide an update on its status? S-67609484

This project has been a blight on the Coolah community, and the greater district, for nearly 10 years. The number of exhibition periods for this project alone, where locals and other concerned community members use their valuable, volunteer time in an attempt to mitigate impacts, has been onerous and very frustrating. S-67609484

The claim that the project will provide affordable energy is obviously false. It will only produce electricity annually about 30% of the time on average. That means it must recover all of its enormous upfront costs, ongoing operating costs, decommissioning/rehabilitation/ disposal costs and profit from the 30% of output it produces. This can only mean higher kwh costs to consumers. S-67612708

This project should never been allowed to go ahead and now to increase the height of turbines and also native vegetation clearing is crazy! S-67569220

Concerns from the community in relation to the overall Project have been addressed previously in the Submissions Report prepared for Modification 1 (Mod-1 Project). This is available on the NSW Major Projects Portal website. [4]

5.2.2 Wind Farms/CWO REZ in General

I do Not agree to the windfarms in our area. S-67140729

Renewable energy has developed itself a reputation as being environmentally friendly. This report will show that this reputation is entirely undeserved. Far from improving the world around us, wind, solar, biomass and even hydropower can be highly damaging. A renewables revolution on the scale envisaged by global warming activists will see our landscapes desecrated, our fields industrialised or turned to monocultures, and our wildlife slaughtered. Far from making the world a better place, renewable energy will destroy all we hold dear. Is this really what environmentalism has come to mean? S-67599752

Cease and Desist all Wind Projects in the Liverpool Ranges, Coolah area, Hunter area, and do it now, and Save the Environment, Save the Environment, yes, Save the Environment. S-67609488

[4] https://www.planningportal.nsw.gov.au/major-projects/projects/mod-1-turbine-and-infrastructure-changes

The NSW Government's Electricity Strategy (DPIE, 2020) advocates for a mix of technologies to improve the efficiency and competitiveness of the NSW electricity market by reducing risk, cost and process-driven delays and by ensuring investment in new energy saving, demand responsive generation technologies. The establishment of renewable energy zones, such as the CWO REZ, is also a NSW Government policy decision that seeks to connect multiple renewable energy projects and electricity storage close to transmission infrastructure to deliver clean, reliable and cheaper electricity to the homes and businesses in NSW.

The comments made by the community in relation to the CWO REZ and renewable energy in general are noted however these comments relate to NSW Government policy and go beyond the scope of the Project and Modification 1 (Mod-1 Project).

5.3 The Project

5.3.1 Project Design

There needs to be definite end date for the use of this facility for TWA, the 4 year period could well be extended for other "temporary uses". S-67597213 *"Detailed design" must not be approved prior to the public being given a chance to comment - especially for internal access roads, firefighting water supply volume, water management, erosion and sediment controls, wastewater management, accommodation requirements, project timing, utility estimates, traffic impacts on local roads, layout for the facility, licences and permits and construction scheduling.* S-67609484

Mod-1 Amendment 2 (TWA Facility) seeks approval for the establishment of a Project-specific, temporary workforce accommodation facility to service the needs of the Project during the construction phase only. The TWA Facility is expected to be decommissioned at the completion of wind farm construction, which is scheduled to take approximately four years.

A number of community submissions received during the exhibition period raised the possibility of some infrastructure being retained (either on site or within the local community) once wind farm construction has ceased and the construction workforce has been demobilised. As outlined in the Mod-1 Amendment 2 Report (TWA Facility), there may be an opportunity to leave infrastructure (on-site or in/around nearby communities) that is important to the landholder and the local community in place once construction has ceased and the construction workforce has demobilised. This could include groundwater bores (for firefighting purposes for instance), potential water/sewage treatment facilities, housing or community infrastructure. Should this be considered in the future, an agreed alternative use would need to be negotiated and approved by DPHI and the landowner.

The conceptual layout of the Project is described in the Mod-1 Amendment 2 (TWA Facility) and is subject to a further detailed design process. Detailed diagrams of the indicative conceptual layout were provided in Appendix B of the Mod-1 Amendment 2 Report (TWA Facility). This is consistent with the approach for development approvals across NSW, with standard conditions requiring the Project as constructed to be consistent with that approved. The proposed conceptual layout has been prepared based on the best knowledge available at the time and by applying an avoidance hierarchy approach. The concept layout plan is preliminary in nature and technical studies completed to-date have adopted a worst-case conservative assessment approach. The BOP Contractor will be responsible for developing the detailed design and undertaking updated impact assessments wherever relevant, and to construct of the TWA Facility in accordance with all relevant approvals.

5.3.2 Project Location

Let's save the social fabric of Coolah and keep this camp a stand-alone facility as far away from the town as possible. The obvious place for it to be located is in the middle of the project itself. S-67295706

TILT should be forced to relocate the TWA amongst the land hosts who are so keen to host the infrastructure … S-67597213

The social, logistical and road user problems that were deemed inappropriate for Cassilis are equally inappropriate for Coolah. S-67597707

If public safety is of any concern to DPE and the developer, the camp site should not be built on the edge of town but relocated more centrally within the project. S-67599206

In order to minimise the visual and sound pollution for the residents of Coolah the TWA should be located deep within the project, not on cropping country and not in a flood zone. S-67599459

The temporary workers accommodation (TWA) should not be located on the outskirts of Coolah for the same reasons it was deemed inappropriate for Cassilis. … It would surely make more sense to have the TWA more centrally located within the project than to transport workers from one end of the project to the other. The developer will be putting internal roads in anyway, why not transport workers internally at much reduced distance rather than all the way around on public roads? If Tilt and DPE take public safety seriously, an internal TWA is the least they can do. S-67600956

The location of Tilt's temporary workers accommodation (TWA) at one end of the project makes no sense. It should be located centrally within the project boundary to minimise the movement of workers and keep the traffic down on public roads. ... Using internal roads to the accommodation site would make much more sense logistically for the project and would help mitigate against all the detrimental effects of traffic and social problems arising from 600 workers living on the outskirts of Coolah. S-67602956

The location for the TWA Facility was subject to a site selection process aimed at reducing the environmental, social and cultural impacts as far as practicable. The suitability of the TWA Facility site is based on:

- consultation with the Coolah and Cassilis community in relation to the potential alternative locations
- proximity to the Project to reduce travel time as far as practical for the Project workforce
- location within a heavily modified landscape, comprising of existing agricultural land mapped as Category 1 vegetation to minimise impacts to biodiversity and Aboriginal archaeology
- suitable topography allowing for siting infrastructure outside of 1% annual exceedance probability (AEP) flood depths
- suitable connectivity to existing road network to facilitate construction and use of the TWA Facility and vehicle movement once operational
- suitable distance to nearby dwellings and sensitive land uses to avoid/minimise impacts on nearby residents and the local community while also providing a suitable distance (>2 km) to the Coolah township.

Further detail on the site options considered for the TWA Facility and associated consultations is provided in the Mod-1 Amendment 2 Report (TWA Facility).

5.4 Procedural Matters

5.4.1 Exhibition Period

Firstly, I would like to say that this timeline given for submissions is unacceptable the document was signed off on 18 December … and Tilt all enjoyed their holidays to put it out in February with 12 days to submit. S-67535959

… simply because the Document signed off … on December 18 2023 was put out in February with 12 days till closure of submissions. Sure, everyone can read and digest the hundreds of pages of Data and find the response and meet with their colleagues to coordinate a meaningful response … S-67605713

Late on January 30th, the Department advised that the exhibition would commence the next day. The exhibition period was the minimum 14 days. How dare you! S-67295706

Due to time constraints and the overwhelming amount of reading, research and submissions required for everything related to the CWO REZ, renewable energy infrastructure and the "rapid transition to renewables" I have not adequately read the Amendment Report or any of the associated documents. S-67609484

According to section 13 of Schedule 1 of the EP&A Act, the minimum public exhibition period for re-exhibition of any amended application (if any) is determined by the person or body responsible for publicly exhibiting the application or matter, in this case the DPHI.

For the Mod-1 Amendment 2 (TWA Facility), DPHI chose an exhibition period of 14 days to allow the community to comment on the merits of the Mod-1 Amendment 2 (TWA Facility) before a final decision is made. The Proponent (Tilt Renewables) and the consultant (Umwelt) were not involved in the decision-making process regarding the length of the exhibition period.

5.4.2 Engagement

If not already required or in place, a required ongoing formal communication structure requirement for the Project owner, community and Council for the entire operation and decommissioning period. This should provide community and Council with the ongoing opportunity to collaborate.

…

I find the opportunities for Community to actively be "Involved", "Collaborated" or "Empowered" as suggested in the IAP2 Framework to be lacking and suggest that the applicant could demonstrate (and evidence) further opportunities for this to occur. I find that most commonly "Informing" and "Consulting" continue to be the standard level of participation offered to community. Eg. Community information sessions, drop-in sessions, documents on public exhibition, surveys etc S-67535957

What evidence has TILT supplied to confirm that immediate neighbours were consulted (not just an offer to drop in to their Coolah office) prior to the CCC meeting on 5 October?

…

Two days consultation in the town of Coolah is inadequate. Few in the town are willing to engage with TILT, there are many community groups in town who have learned the hard way that TILT are here to throw their money and weight around the town and if you dare to suggest anything negative about the project you are cancelled. S-67597213

There are 18 neighbours within 5 km of the TWA. Many state that TILT did not directly consult with the neighbours at the outset of the proposal. S-67599464

Communication from TILT appears to be via their email newsletter or an insert in the local paper. Many near residents did not know about the TWA until they heard it from others they met in the street. Why were these neighbours not directly consulted at the outset of the proposal? S-67603710

A detailed description of the community engagement and consultation undertaken prior to submission was provided in Section 5 of the Mod-1 Amendment 2 Report (TWA Facility).

Stakeholder engagement commenced prior to site selection and, following initial investigation and consultation with both Warrumbungle and Upper Hunter Shire Councils, two sites were short-listed and subject to detailed analysis and community consultation. Community consultation and engagement was undertaken to gather feedback from near neighbours, the broader community and key stakeholders in relation to the proposed TWA Facility. Most of this engagement was delivered through in-person meetings with neighbouring landholders, key stakeholder meetings and through three drop-in community sessions held over three days between 24 and 26 October 2023 in the local townships of Cassilis (Cassilis Bowling Club) and Coolah (Project shopfront, located at 50 Binnia Street, Coolah).

The consultation activities on the proposed TWA Facility were chosen to ensure those with the greatest potential for impacts had the greatest opportunity to be involved through one-on-one engagement while also ensuring the broader community was able to participate by attending a drop-in session or provide online feedback via the dedicated survey if desired.

A Stakeholder and Community Engagement Plan (SCEP) has been developed for the overall Project and is a dynamic document which outlines the engagement and communication activities to be undertaken through each phase of the development. The SCEP is updated during development, delivery and construction phases of the Project to capture key activities undertaken to date and to review their effectiveness. The SCEP has been prepared with reference to NSW and Commonwealth guidelines and the International Association for Public Participation's (IAP2) core values and public participation spectrum.

Further consultation that has been undertaken since submission of the Mod-1 Amendment 2 Report (TWA Facility) is described in **Section 3.3**.

5.4.3 Assessment Process/Adequacy

At the time of publishing of the advertisement, the Minister for Planning and Public Spaces has not directed that a public hearing be held. Really? Is that because Paul is still in Holiday mode and hasn't sent through the memo? This cannot be the continued direction of dialogue between planning and the stakeholders when the health and wellness of an entire community are at stake. S-67605713

The absence of any Management Plans listed in the Amendment Report including but not limited to Environmental Management Plan (EMP), Waste Management Plan (WMP), Traffic Management Plan (TMP), Bushfire Emergency Management Plan (BEMP). The community does not have adequate information without these plans being provided in full. When will they be made publicly available for comment? S-67609484

The EP&A Act sets out the key roles and functions of the Independent Planning Commission, the Minister of Planning and Public Spaces, and the Department of Planning, Housing and Infrastructure in the State's planning system.

The Independent Planning Commission's key role is to make decisions on large and contentious development applications in NSW. This only occurs when certain conditions are fulfilled under the applicable rules. The Independent Planning Commission is the consent authority for those SSD applications:

- that are not supported by relevant council(s) or
- where the department has received more than 50 unique public objections or

- that have been made by a person who has disclosed a reportable political donation in connection with the development application.

When the relevant conditions are not fulfilled, the decision maker is generally the Minister of Planning and Public Spaces.

Management plans are generally a requirement of the development consent and will be prepared post-approval and made available to the public via the NSW Major Projects Portal website[5] and via the Project website[6] where applicable.

[5] https://www.planningportal.nsw.gov.au/major-projects/projects/mod-1-turbine-and-infrastructure-changes

[6] https://www.tiltrenewables.com/assets-and-projects/liverpool-range-wind-farm/

6.0 Response to Additional Agency Submissions for Amendment 1

The following section provides a response to the additional submissions and requests received from Government agencies in relation to the Amendment 1 Report (RTS Project) and the Mod-1 Project Submissions Report submitted to DPE in August 2023. These responses are provided as part of the current report as a formal Submissions Report is not required for these additional submissions and requests.

6.1 Department of Planning, Housing and Infrastructure

6.1.1 Request for Additional Information

A request for additional information was received from DPE[7] on 15 September 2023. A formal response to the requests was provided to DPHI on 13 March 2024. The requests and responses are summarised below.

Biodiversity *Demonstrate avoidance and minimisation of impacts to, and quantify the additional and appropriate mitigation measures proposed for the Box Gum Woodland Critically Endangered Ecological Community.*

Substantial work has been undertaken to avoid and minimise impacts to Box Gum Woodland Critically Endangered Ecological Community (CEEC) during the assessment processes for the Approved Project, as well as subsequent assessments for Modification 1 (Mod-1 Project). A technical memo was prepared and sent to DPHI in March 2024 to provide additional information regarding the avoidance and minimisation measures implemented and a comparison of the potential impacts to Box Gum Woodland CEEC from the Approved Project and the Mod-1 Project. A copy of the technical memo is provided as **Appendix 8**.

Following consultation with BCS, quantification of the additional and appropriate mitigation measures proposed to reduce the risk of serious and irreversible impacts (SAII) to Box Gum Woodland CEEC has also been undertaken (refer to **Section 6.6** below). A copy of the report, prepared by Wedgetail Project Consulting Pty Ltd is attached to Appendix B in **Appendix 3**.

Visual *Provide comparative wireframes with vegetation modelled for dwellings C4-7, C4-9, C5-3 and C6-3.*

Subsequent to this request, DPHI identified that dwelling C4-5 should be assessed rather than dwelling C4-7, as the two dwellings are within the same land boundary and dwelling C4-5 is the primary dwelling.

Additional Information for Visual Impact Assessment (VIA) of the four dwellings was prepared by Moir Landscape Architecture to compare with the results of the previous assessment conducted for the Mod-1 Amendment 1 Report (RTS Project). The memo, included as **Appendix 5**, concluded that there would be no increase to the visual impact from any of the assessed non-associated dwellings from the ratings

[7] The request for additional information was received from the Planning group within DPE. Following machinery of government changes, as of 1 January 2024 the Planning group is now within DPHI.

determined in the VIA conducted as part of the Mod-1 Amendment 1 (RTS Project) Report. The vegetation overlay determined that existing intervening elements, including vegetation and shed structures, will further reduce the visual impact rating for non-associated dwellings C5-3 and C6-3 from medium to low. The visual impact rating for non-associated dwelling C4-9 is likely to remain low. Existing intervening vegetation reduces visibility to the Project turbines from non-associated dwelling C4-5, however, the assessment determined that the visual impact rating will likely remain medium without mitigation. The implementation of mitigation in the form of screen planting is recommended to reduce the impacts from dwelling C4-5 to a low visual impact rating.

A copy of the Additional Information for Visual Impact Assessment (VIA) is provided in **Appendix 5**.

Workforce Accommodation
Detail and assess impacts associated with the development of a workers accommodation facility.

Since this request the Mod-1 Amendment 2 Report (TWA Facility) has been lodged with the DPHI which contains a detailed description and assessment of the impacts of the proposed TWA Facility. The Mod-1 Amendment 2 Report (TWA Facility) is available on the NSW Major Project Portal website. [8]

6.1.2 Request for Clarifications

The following clarifications were requested by DPHI in an email dated 12 April 2024. A formal response to the request was provided to DPHI on 18 April 2024. The request is summarised below.

Safe Intersection Sight Distance (SISD)

- Please provide a summary table of site access points assessed for SISD noting compliance with the SISD, whether vegetation removal is required to achieve compliance and any mitigation proposed where the required SISD cannot be achieved; and
- Provide justification for the proposed mitigation where SISD cannot be achieved.

Biodiversity

- Clarify whether vegetation removal required to achieve SISD at site access points has been assessed in the Biodiversity Development Assessment Report (BDAR).

A response to the above matters is provided in **Appendix 9.**

[8] https://www.planningportal.nsw.gov.au/major-projects/projects/mod-1-turbine-and-infrastructure-changes

6.2 Warrumbungle Shire Council

Adverse impacts on Council's road assets

The proposed Amended Project will require upgrades to approximately 80 kms of Council's roads. Negotiations have a long way to go on this matter.

At this point in time Council has no certainty that its local road assets, to be impacted by the development, will be protected from deterioration, both over the short and longer term.

Based on forensic traffic analysis of the RTS-Amended Project Council estimates that the Developer's presented 103,000 construction-phase one-way heavy vehicle movements (206,000 movements counting both directions) represents the least-case likely number of movements, it is likely, based on our analysis, that actual heavy vehicle movements will be at least double and possibly three times higher due to a wide range of uncertainties including, inter alia, sources of materials (e.g. water, sand and gravel) and the delayed impacts of project construction on subsurface conditions.

As a consequence, the total road maintenance costs are predicted to be tens of millions of dollars, when the project traffic is considered over the four-year construction period and a (minimum) 30-year operational period and a decommissioning period. This is based on global best-practice methods (Equivalent Standard Axles) as per the Austroads Guide to Pavement Technology. The costs include proactive and reactive maintenance, reseals, patching, regrading, re-sheeting, and/or full rehabilitation and renewal.

The costs do not include upgrade or widening works by the developer required for safety or other functions, or the cost of regrading and repairing failures during the construction period (which the Developer is responsible for), as those treatments do not by themselves renew and reset pavement effective life.

Without pavement renewal being funded and committed, significant sections of the road can be expected to fail prematurely and enter unsafe and unserviceable states (including potholes, rutting, corrugations, etc). The legacy of the very high project traffic during construction and decommissioning will likely be reflected in Council's financial and road operations for years to come.

Council is also seeking a Planning Agreement and other funding arrangements to offset the future road maintenance costs.

The plans to remove seal from 15 kms of local roads for the developer's convenience prior to project construction will also require a comprehensive and sympathetic collaboration process with affected local residents, and Council as the Roads Authority reserves the right to approve or refuse the request. Mitigation measures relating to noise and dust will need to be addressed with affected stakeholders.

As described in **Section 4.15**, the Proponent has commenced negotiations on the VPA with both WSC and UHSC and proposed that it is amended to be generally in line with the Draft Benefit Sharing Guidelines (DPE, 2023). The Proponent provided a written response to WSC's Key Terms in early March 2024 to both WSC and UHSC, and proposes that the amended VPA is fair and reasonable, ensures lasting legacy benefits are delivered to the local Coolah and Cassilis communities, and provides some decision-making power for the community to determine how Community Enhancement Funds are allocated. The VPA will consider future road maintenance costs.

The Proponent is targeting agreement on the terms of the amended VPA in April 2024. Legal drafting and negotiation of the terms and conditions of the amended VPA would commence shortly thereafter.

As discussed in Section 7.2.4 of the Supplementary Traffic Impact Assessment submitted with the Mod-1 Amendment 1 Report (RTS Project), the key rationale and benefits of the proposed removal of existing seal along approximately 15 km of roads of the Project are as follows:

- The existing condition of the road will be improved to the construction phase standard required to accommodate the increase in daily vehicle movements due to project related construction traffic. This

would include widening on corners to accommodate sight lines and Over Size Over Mass (OSOM) movements where relevant.

- The unsealed condition is proposed to be maintained through the construction phase of the Project by the Proponent for ease of maintenance under construction loading.
- The final sealed solution for these specific sections can then be tailored to the local and operational traffic (as agreed with the local road authorities) to reduce maintenance requirements for the relevant local authority. These works will be subject to detailed design and further consultation with Council.

The Proponent has committed to undertake dust suppression watering on unsealed sections of road during the construction phase of the Project. A targeted consultation program will be undertaken with residences located along the sections of the local roads in question (Pandora Road, Rotherwood Road, Turee Vale Road) prior to the commencement of any upgrades or repair treatments. As part of this, the Proponent will:

- Undertake face-to-face visits and undertake letter drops/emails/newsletters at each relevant residence to ensure the owners/occupiers are aware of the proposed approach, timing for construction works, primary contact numbers in the event of a complaint or concern, and be provided with a copy of the Complaints Management Procedure.
- Make available all relevant information, including maps and a Public Road Upgrades fact sheet, at the Project shopfront in Coolah and online.

Temporary Worker Accommodation

The RTS-Amended Project documentation contains no detail as to how and where the construction workers will be accommodated. It limits commentary to stating there may be one or two temporary camps (SIA report page 37). Before any contemplation of project approval is considered, Council requires full details of what/where/how temporary worker accommodation camps (TWA) are planned to be built.

The RTS also suggests up to 95 current local beds will be used by construction workers but that this won't impact the temporary accommodation needs of others. Council rejects this assertion.

Council notes the DPE now requires details pertaining to TWA facilities and assessed impacts (including traffic) by 16 November 2023. Council requests to be provided with the opportunity to review and evaluate the information provided at that time by the Developer.

The Developer advised Council on 13th October 2023 that it intends to package the TWA (one or two sites, 500+ beds) and a 500,000 tpa x 4-year quarry to be established on a greenfield site, as a 'Second Amendment' to the RTS Project, whereas all other matters would be submitted as the 'First Amendment'. Council strongly objects to this strategy.

Council recommends all aspects of the RTS-Amended Project should be in the one package, together with all the predicted impacts and mitigation measures. Splitting the project assessment will create confusion in the community, risk overlooking project-aggregated impacts and create yet more demands on Council's assessment team.

Regardless, the general public and Council wishes to see the full impact assessment documentation of the TWA camps and the quarry before the DPE has any contemplation of issuing consent.

If the developer splits up the assessment of the amended project Council will be reviewing its legal options.

Since this submission, the Mod-1 Amendment 2 Report (TWA Facility) has been lodged which contains a detailed description and assessment of the impacts of the TWA Facility. The Mod-1 Amendment 2 Report (TWA Facility) is available on the NSW Major Project Portal website. [9]

[9] https://www.planningportal.nsw.gov.au/major-projects/projects/mod-1-turbine-and-infrastructure-changes

WSC has made an additional submission specific to the TWA Facility which is addressed in **Section 4.15**.

Planning Agreement

The documentation states "Tilt Renewables is currently consulting with WSC and UHSC to determine how the VPA could be revised in a mutually agreeable way that will benefit the communities in/around Coolah and Cassilis" (Page 98 Main Report). Council rejects this statement as it has had no interaction with Tilt Renewables on progressing a Planning Agreement since we tabled our Planning Agreement Key Terms in early July 2023.

Council is very concerned that the DPE is considering this proposal to be a modification and may 'roll over' the existing VPA. With the proposed significant increase in traffic volumes, possibly as high as seven times the original consent, the Planning Agreement must be renegotiated. Council is keen to promptly enter detailed negotiations with Tilt Renewables on a Planning Agreement.

The Developer also advised Council on 13th October 2023 that it has deferred Planning Agreement negotiations because it is seeking direction from the DPE's soon-to-be released 'refreshed' Wind Farm Guidelines. The Developer advised it is also waiting on knowing what the Access Fees payable are likely to be, because it seems to believe the total benefits package is what is more important, and thus the Planning Agreement quantum may be reduced.

Council strongly objects to what appears to be a 'muddying of the waters' by attempting to roll other funding arrangements into the Planning Agreement calculation.

Council is adamant that the Planning Agreement quantum is to be 1.5% of the CIV, consistent with the joint policy position established with the three main REZ Councils. Furthermore, several other developers have already shown leadership and committed to the 1.5% x CIV. They should not be disadvantaged by being an early mover.

The developer also informed Council that it may be early 2024 before it is prepared to negotiate the Planning Agreement.

As discussed in relation to road upgrades above, the Proponent has commenced negotiations on the VPA with both WSC and UHSC and proposed that it is amended to be generally in line with the Draft Benefit Sharing Guidelines (DPE, 2023). The Proponent provided a written response to WSC's Key Terms in early March 2024 to both WSC and UHSC, and proposes that the amended VPA is fair and reasonable, ensures lasting legacy benefits are delivered to the local Coolah and Cassilis communities, and provides some decision-making power for the community to determine how Community Enhancement Funds are allocated. The VPA will consider future road maintenance costs.

The Proponent is targeting agreement on the terms of the amended VPA in April 2024. Legal drafting and negotiation of the terms and conditions of the amended VPA would commence shortly thereafter.

Cumulative impacts

The RTS-Amended Project documentation hints at the uncertainty regarding who is responsible for addressing the cumulative impacts arising from ten (10) electricity generation and transmission projects in the Shire.

For instance, page 51 of the Main Report states:

- *The State Govt is "actively addressing" cumulative impacts associated with accommodation, services, social and economic matters; and*
- *In relation to traffic impacts, the State Government is addressing this matter as it "cannot be addressed by individual proponents in isolation. Requires action by NSW Government".*

As the front-line Government entity responsible for managing the affairs of the Shire, Council strongly urges the NSW Government (both DPE and EnergyCo) to do even more on this front to ensure the local population is not burdened with environmental, social and economic costs that rightfully should be carried by the Developer or the State itself.

As discussed in **Section 4.15**, while the Approved Project was one of the first wind farms to be approved in the locality, since its approval, and due primarily to the designation of the CWO REZ, an increasing number of renewable energy projects and associated infrastructure projects are currently being progressed. While

these projects bring significant benefit to the region through investment and employment opportunities, demand for services, particularly accommodation, has the potential to result in cumulative impacts.

As discussed in the Mod-1 Amendment 2 Report (TWA Facility), the AEF prepared to support the Modification 1 Project identified that there is not enough accommodation within the region to support the expected construction workforce for the Liverpool Range Wind Farm Project without significantly disrupting the local tourism and short and long-term accommodation market. To address this issue the Proponent proposed the amendment to the Mod-1 Application to provide accommodation for the Project workforce as ancillary development to the broader wind farm project (i.e. the TWA Facility).

The Proponent will continue to collaborate with EnergyCo and other NSW Government agencies in relation to addressing cumulative impacts. The inclusion of the proposed TWA Facility as part of the Project is an example of the Proponent's direct response to address cumulative impacts on accommodation in the region, and will also assist in reducing cumulative impacts on traffic.

Not 'Substantially the Same Development'

As referenced in its Mod EIS submission, Council asserts the Mod does not pass the 'Substantially the Same Development' Test. A key reason is that the 'existing environment' for the project had changed significantly, namely from a long-established farming area to the gazetted Renewable Energy Zone, a planned semi-industrial zone for electricity generation and transmission, with ten (10) projects in the Shire and 35 across the CWO REZ. In addition, traffic impacts have been significantly understated, and a major greenfield site quarry is to be established.

As previously discussed in Section 4.19.4 of the Submissions Report for the Mod-1 Amendment 1 (RTS Project), on 2 February 2021 DPE provided the following response to the Proponent's Letter of Intent regarding the Mod-1 Project, which confirms the appropriate planning approval pathway is a modification to the Development Consent under section 4.55(2) of the EP&A Act:

> *"I refer to your letter indicating the intention to modify the Liverpool Range Wind Farm development consent (SSD 6696) to increase the maximum wind turbine tip height, decrease the number of wind turbines, amend the construction traffic route and increase disturbance areas across site.*
>
> *…Based on the information provided, the Department considers that the appropriate approval pathway for the modification application would be section 4.55(2) of the Environment Planning and Assessment Act 1979 (The Act) and the Department would place the modification application on public exhibition for a minimum of 14 days."*

The application of section 4.55(2) of the EP&A Act was addressed in detail in the Mod-1 Project Modification Assessment Report. This included consideration of the application of the 'Substantially the Same Development' Test to the Mod-1 Project in light of the key principles from relevant case law and confirmed that the Mod-1 Project remains 'substantially the same development' as that originally authorised by the Development Consent. The changes proposed to the Project as part of the Mod-1 Amendment 1 (RTS Project) and Mod-1 Amendment 2 (TWA Facility) further reduce the impacts of the modification and do not change the conclusion that the Project remains 'substantially the same development' as that originally authorised by the Development Consent.

Further, it is considered that the gazettal of the CWO REZ by the State Government supports the suitability of the 'existing environment' of the Project for the establishment of a large-scale renewable energy project.

As previously discussed, the traffic impact assessments undertaken for each stage of the approval process have appropriately accounted for all construction related traffic including consideration of any relevant cumulative traffic impacts. A Traffic Management Plan will be developed for the Project, in consultation with government agencies and Councils, to appropriately manage Project related traffic and any associated cumulative impact. The Proponent has also committed to undertake various road upgrades along the construction route to address project related traffic impacts. The suite of upgrades and repairs have been determined in consultation with local Councils and TfNSW and are detailed further in the Supplementary Traffic Impact Assessment prepared for Mod-1 Amendment 1 (RTS Report) available on the NSW Major Projects Portal website.[10]

As previously discussed, the establishment of a project specific quarry is being assessed under a separate SSD application by Australian Resource Development Group Pty Ltd (ARDG). Consultation will be undertaken with WSC through this separate assessment process.

6.3 Upper Hunter Shire Council

Council acknowledges that the latest design amendments to the project in response to ongoing consultation with agencies, progression of detailed design and submissions received during the exhibition period will potentially reduce the environmental impacts of the wind farm as proposed in Mod 1. *We have no further comments in relation to the matters raised in our submission dated 10 October 2022 and the applicant's response to these matters, however, we note that Council is yet to review and negotiate a revised planning agreement for the modified project. As stated in our submission, Council will be requiring a review and renegotiation of the planning agreement because of the substantial and fundamental changes reflected in the Mod, compared to the original project.*

As described in **Section 4.15**, the Proponent has commenced negotiations on the VPA with both WSC and UHSC and proposed that it is amended to be generally in line with the Draft Benefit Sharing Guidelines (DPE, 2023). The Proponent provided a written response to WSC's Key Terms in early March 2024 to both WSC and UHSC, and proposes that the amended VPA is fair and reasonable, ensures lasting legacy benefits are delivered to the local Coolah and Cassilis communities, and provides some decision-making power for the community to determine how Community Enhancement Funds are allocated.

The Proponent is targeting agreement on the terms of the amended VPA in April 2024. Legal drafting and negotiation of the terms and conditions of the amended VPA would commence shortly thereafter.

[10] https://www.planningportal.nsw.gov.au/major-projects/projects/mod-1-turbine-and-infrastructure-changes

6.4 Mid-Western Shire Council

Accommodation and Employment Framework Amended Report

Council supports the establishment of temporary workforce accommodation facilities close to the site to accommodate incoming non-resident workforce.

3.0 Regional Profile

Council note in table 3.1 Mudgee is not considered as a key settlement.

Table 3.4 notes the median weekly rental in MWRC is $330 per week this number does not reflect the current rental environment where the current median rental in MWRC is $480 per week (June 2023).

Table 3.6 notes Kandos, Gulgong and Rylstone have Police stations; Council wishes to inform the Proponent these are small regional Police stations and not staffed full time.

5.0 Key Stakeholders Engagement

Table 5.1 notes no stakeholder engagement was undertaken with Mid-Western Regional Council (Jan to April 2023).

Council requests consultation be initiated to ensure that Council and the community have current and accurate information about the project, and to provide feedback on the proposed project. As such, consultation should include the provided impact area, including Mudgee and Gulgong, where the proponent proposes to source and house workers.

6.0 Accommodation Framework

6.2.1 Short-term Accommodation notes there are several motels, hotels and Airbnb offering short-term accommodation in Gulgong, Mudgee and across the region.

6.2.2 Longer Term Rental Accommodation notes the only locality with significant availability of rental accommodation is Mudgee. Table 6.3 notes 138 rental stock is available in Mudgee (2021) This does not reflect the current long-term rental availability (October 2023) 66 houses/units in Mudgee.

Council is strongly concerned with this aspect of the project. There is currently a severe shortage of appropriate accommodation availability in the region for tourism, caused by the competing demands placed on accommodation availability by State Significant Developments. What the proponent fails to address is that there are multiple projects within and surrounding the Mid-Western Region looking to construct at the same or similar time.

The workforce and accommodation strategy should consider that Council strongly objects to the use of tourist and visitor accommodation for any construction workforce, and there is limited availability across all accommodation types in the Mid-Western Region. Where workforce is proposed to be housed in the Mid-Western Region, it is requested that Council is provided the opportunity to approve the Workforce Accommodation Plan prior to construction.

Since the time of this submission, the Proponent has lodged the Mod-1 Amendment 2 Report (TWA Facility) which proposes the establishment of a Project-specific temporary accommodation facility to house up to 600 people, near Coolah in the Warrumbungle Shire Council LGA. As such, the issues raised in the Mid-Western Shire Council submission are no longer applicable, as no accommodation for the construction workforce will be sought specifically within the Mid-Western Shire Council LGA.

A copy of the Mod-1 Amendment 2 Report (TWA Facility) is available on the NSW Major Projects Portal website.[11]

[11] https://www.planningportal.nsw.gov.au/major-projects/projects/mod-1-turbine-and-infrastructure-changes

6.5 Muswellbrook Shire Council

Without a strategic solution to address Council's concerns, at a minimum the Proponent for the Project would need to address the incremental and cumulative impact concerns of Council. As such, the following would need to be addressed.

Community Enhancement

1) Council requires compensation for the impact to the local community for use of Bengalla Road and Wybong Road.

2) The Proponent will need to offer to enter into a Planning Agreement with Council that includes the following:

a) $1000.00 per OSOM load to cover general dilapidation of road infrastructure. These funds would be used to undertake repairs where it is difficult to attribute damage to any particular Over Size Over Mass (OSOM) load.

b) $400,000.00 to employ a roads officer for a period of 4 years. This officer will process OSOM permit applications, follow loads to ensure street signs have been properly reinstalled for the safety of the travelling public, and to observe if loads have caused damage to Council infrastructure.

c) $200,000.00 to contribute toward the cost of engineering and environmental staff employed at Council. These staff are required as the workload is additional to normal Council business, and the proponent does not pay land rates. The positions are required to provide feedback on transport management plans, upgraded road designs, monitor road upgrade construction, respond to modifications to projects, handling complaints from the public etc.

d) $200,000.00 for community, environmental and economic development to offset the impact that frequent load movements will have on our community and the people who work in the Local Government Area.

EnergyCo has committed to providing road upgrades from the Port of Newcastle to the CWO REZ along the State classified road network for candidate foundation generators (which includes the Liverpool Range Wind Farm project) to facilitate the OSOM movements. As such, these external road works within the Muswellbrook LGA to facilitate the OSOM upgrades are not part of the Project and will be subject to a separate development approval process by EnergyCo. Any compensation to Councils along this route would be coordinated by EnergyCo.

Road Upgrades

3) Council requires a 'once and done' approach for the road upgrades along local roads (including the intersection of Golden Highway and Denman Road) as this will become the route for over dimensioned vehicle movements heading west and north of Muswellbrook until upgrades occur to the State Roads to make them fit for purpose. The 'once and done' approach will avoid constant road works to upgrade intersections and infrastructure. Based on knowledge of the size and weight of the OSOM anticipated over the next eight years, this would mean:

- *The road pavements and drainage infrastructure along the road routes would need to be upgraded to be capable of withstanding a minimum of one hundred, 350 tonne transformers loads and up to 6,000 tower movements; and*
- *Any changes to intersections, road geometry, road signs, intersection lights and other street furniture will need to be able to accommodate the above movements.*

4) The Proponent must implement the road upgrades to the following standards and be undertaken in consideration of a Consolidated Road Upgrade Plan developed as part of a Transport Strategy.

- Road Upgrades will generally be to the following standards:

- *Sealed local road to remain a sealed road: pavement depth in accordance with applicable standards or 300mm road base, 6.0 m seal and 8.0 m formation width, topped with 14/10 double/double bitumen seal.*

- Council will consider requests to vary the upgrade treatment standards on Local rural roads for specific sections of the road, subject to documentation of physical and environmental constraints where application of road width standards, described in the Consent Conditions, will cause unreasonable ground disturbance.

- Council will require upgrade treatments to allow for any passing bays recommended in the traffic management plans for construction of the wind farm.

- Consent under section 138 (s138) of the Roads Act 1993 (Roads Act) will be required for any work in, on or over a public road.

- Any cost (including legal) resulting from the execution of Council's powers under Section 138 of the Roads Act, or from any landowner court action will be paid for in full by the Proponent.

- Prior to issuance of any s138 consent, the Proponent will provide detailed information to Council on road geometry, road surface, drainage, proposed services within the road corridor, and results from a Road Safety Audit.

- Road construction must be to relevant AusRoads and AUSPEC standards (subject to geotechnical assessment, Road Safety Audit and to Council's written satisfaction).

- Water way crossings and filled depressions will need to be upgraded to applicable standards. Taking into consideration environmental, geomorphological and river hydraulic factors. Pre-construction, a detailed flood assessment should be undertaken by a suitably qualified consultant, to Council's written satisfaction. An additional structural assessment of any existing drainage structures to be retained within the road reserve is to be provided demonstrating adequate load capacity.

As discussed above, EnergyCo has committed to providing road upgrades from the Port of Newcastle to the CWO REZ along the State classified road network for candidate foundation generators (which includes the Liverpool Range Wind Farm Project) to facilitate the OSOM movements. As such, these external road works within the Muswellbrook LGA to facilitate the OSOM upgrades are not part of the Project and will be subject to a separate development approval process by EnergyCo.

Transport Strategy

5) Prior to commencing the road upgrades, the Proponent must prepare a Transport Strategy, in consultation with Council, which includes a Consolidated Road Upgrade Plan that outlines the following:

i. road upgrade requirements for the proposed development as well as any proposed development that is likely to use the same road corridor for construction access;

ii. assessment of the potential cumulative impacts of multiple development on road infrastructure, including consideration of traffic generation, safety, vehicle loads, road width requirements and any other relevant factor;

iii. a detailed plan for road infrastructure upgrades that address the substandard road conditions, including narrow lane widths, unformed shoulders, inadequate pavement depths, poor lighting, aged-sealed surfaces and insufficient drainage structures;

iv. clear specifications and construction methods for road width, pavement design, intersections, signage, and other relevant features that addresses the road infrastructure requirement for all identified developments to an acceptable standard suitable for OSOM movements;

v. a timeline for the implementation of road upgrades;

vi. an assessment of the current and projected future asset value of the upgraded roads, considering factors such as road width, traffic capacity, safety enhancements, and alignment with regional transportation standards. The assessment will be undertaken by an independent suitably qualified person.

vii. a detailed assessment of potential impacts of any necessary road upgrades (such as heritage and biodiversity impacts) including consideration of appropriate mitigation measures; and

viii. measures on notifying, seeking feedback from and addressing the concerns of impacted residents around the upgrades.

6) The Transport Strategy must include a contingency plan addressing the potential diversion of public traffic onto alternative roads due to OSOM movements on Bengalla Road and Wybong Road. This plan shall outline measures to monitor and manage any such diversions, ensuring minimal disruption and maintaining road safety standards.

As discussed above, EnergyCo has committed to providing road upgrades from the Port of Newcastle to the CWO REZ along the State classified road network for candidate foundation generators (which includes the Liverpool Range Wind Farm Project) to facilitate the OSOM movements. As such, these external road works within the Muswellbrook LGA to facilitate the OSOM upgrades are not part of the Project and will be subject to a separate development approval process by EnergyCo.

Road Maintenance

7) The Proponent must, in consultation with Council:

(a) undertake an independent dilapidation survey to assess the existing condition of Bengalla Road and Wybong Road, prior to construction, upgrading or decommissioning works; and

(b) undertake an independent dilapidation survey one month following completion of construction, upgrading or decommissioning works, to assess the condition of Bengalla Road and Wybong Road, and describe the necessary repairs to return the route to a condition that is equivalent to, or better than, the existing condition identified in part a); and

(c) repair and/or make good any development-related damage:

(i) identified during the carrying out of the relevant construction and/or decommissioning works if it could endanger road safety, as soon as possible after the damage is identified but within 7 days at the latest; and

(ii) identified during any dilapidation survey carried out in accordance with part b) within 2 months of the completion of the survey, unless the relevant road authority agrees otherwise;

8) Prior to commencement of any construction activities, the Proponent must submit a road maintenance and repair plan to Council for approval in respect of Bengalla Road and Wybong Road prepared in consultation with mining companies. This plan shall outline how potential road damage resulting from transportation activities associated with the development will be managed and remediated and must include the following provisions:

(a) The Proponent will enter into a Deed of Agreement with Council, outlining the responsibilities and obligations for road maintenance and repairs resulting from the transportation activities associated with the project.

(b) The Proponent must develop a Maintenance Management Plan in respect of these roads, prepared in consultation with mining companies and in accordance with Transport for NSW M3 specifications for road maintenance. The Proponent must maintain Bengalla Road and Wybong Road in consultation with mining companies during construction.

(c) The Proponent will provide a bank guarantee or other form of financial security to Council as a safeguard against specific road asset damage related to an incident during transit of OSOM vehicles associated with the development. The value will be determined based on an assessment of assets that have the potential to be damaged in an incident.

(d) The Proponent will undertake dilapidation surveys.

(e) Council will have the right to inspect the road conditions, maintenance efforts and repair work to ensure compliance with the agreed-upon plan.

(f) The Proponent will provide regular reports to Council and mining companies detailing the maintenance and repair activities undertaken, associated costs and any deviations from the plan.

(g) The road maintenance and repair plan, as well as the associated agreements, shall be subject to periodic review and adjustment based on changing circumstances or lessons learned.

9) Where construction-related traffic movements overlap for multiple projects, the Proponent must:

(a) enter into a coordinated agreement with Council for road maintenance and repair of the roads. The coordinated agreement will outline:

i. responsibilities of each party (including mining companies);

ii. process for dilapidations surveys for each project and allocation of maintenance effort and cost;

iii. dispute resolution process;

iv. provisions for periodic review and adjustments to allow for additional projects to enter into the agreement;

v. meeting frequency for parties; and

vi. regular reporting;

(b) establish a joint bank guarantee, financial security, or maintenance fund to cover the costs caused by the combined impacts of all projects.

10) The Proponent shall be responsible for covering all costs incurred by Council in the preparation, development and ongoing costs of the road maintenance and repair obligations, including but not limited to legal consultations, document drafting, and administrative processing. The Proponent shall provide timely reimbursement to the Council for these costs, as outlined in the terms of the agreement.

As discussed above, EnergyCo has committed to providing road upgrades from the Port of Newcastle to the CWO REZ along the State classified road network for candidate foundation generators (which includes the Liverpool Range Wind Farm project) to facilitate the OSOM movements. As such, these external road works within the Muswellbrook LGA to facilitate the OSOM upgrades are not part of the Project and will be subject to a separate development approval process by EnergyCo.

Traffic Management Plan

11) Prior to commencing road upgrades, the Proponent must prepare a Traffic Management Plan for the development in consultation with TfNSW and Muswellbrook Shire Council. This plan must include:

a) details of the measures that would be implemented to minimise traffic impacts during construction, upgrading or decommissioning works, including:

(i) methods to address road gradients that are unsuitable for the transport of long loads (where applicable) including strategies to ensure safe and controlled movement of heavy equipment, taking into consideration road geometry, inclines and turns.

(ii) minimising potential cumulative traffic impacts with other State significant development (SSD) projects in the area as well as any SSD that are likely to use the same road corridor for construction access.

(iii) where construction-related traffic movements overlap for multiple projects, as identified in part (ii), a Construction Movement Plan (CMP) will be prepared in consultation with emergency services and impacted landowners, that will outline the following:

- *a timeline indicating construction periods for each project that may have overlapping construction activities;*
- *identification of potential conflict points and sensitive areas where traffic movements could intersect or overlap;*
- *strategies for the coordination of construction vehicle movements to minimise traffic congestion, ensure safety, and mitigate impacts (including amenity impacts) on local road users, residents, horse studs, coal mines and local businesses with a particular focus on avoidance of peak traffic times;*
- *provisions to ensure that local road users, residents, horse studs, coal mines and local businesses are not unduly disrupted;*
- *methods to address combined effects of road closures and OSOM movements;*
- *communication and notification protocols between project proponents and to the community to share information about construction schedules, traffic routes, potential disruptions and real-time traffic data through the integration of traffic telematics;*
- *safety measures to ensure the safety of road users, including flashing lights, signage, traffic controllers, and any additional measures to enhance visibility and reduce the risk of accidents;*
- *emergency response procedures and communication protocols in case of incidents or emergencies related to construction activities or unforeseen circumstances; and*
- *a detailed monitoring and reporting process.*

(iv) procedures for minimising traffic congestion and to mitigate impacts on local road users, residents, horse studs, coal mines and local businesses with a particular focus on avoidance of peak traffic times.

(v) a contingency plan for traffic movements in the event of damage or unusability of the Denman Road bridge crossing of the Hunter River. This contingency plan should outline alternative routes, communication protocols and emergency response procedures.

As discussed above, EnergyCo has committed to providing road upgrades from the Port of Newcastle to the CWO REZ along the State classified road network for candidate foundation generators (which includes the Liverpool Range Wind Farm Project) to facilitate the OSOM movements. As such, these external road works within the Muswellbrook LGA to facilitate the OSOM upgrades are not part of the Project and will be subject to a separate development approval process by EnergyCo.

6.6 NSW DCCEEW Biodiversity, Conservation and Science Directorate

The numbering in the text boxes below follows that used in BCS's response of 14 October 2022 and the subsequent Modification 1 (Mod-1 Project) Submissions Report. Further, more detailed information is provided in response to each of the points below in the Addendum BDAR in **Appendix 3**.

3. Revise vegetation mapping to include all native vegetation cover
3.1.1 Spatial files for the revised footprint and vegetation mapping should be provided to BCS.

It is understood that all the relevant and necessary GIS files to support the Mod-1 Amendment 1 submission, including the RTS BDAR (Umwelt 2023) were provided at the time of lodgement. However, all GIS files relating to the RTS BDAR have been packaged and will be provided with the BDAR Addendum (**Appendix 3**).

4. Vegetation integrity plots should not be duplicated across IBRA subregions
4.1.1 Where a shortfall of BAM plots occurs, additional plots may be added using either benchmark data or data from the highest scoring plot in that IBRA subregion.

A total of 126 Biodiversity Assessment Method (BAM) Vegetation Integrity Plots (85 completed as part of the Modification 1 (Mod-1 Project) and an additional 41 completed for the Mod-1 Amendment 1 (RTS Project)) have been completed as part of the proposed modifications to the Development Consent. Each BAM Vegetation Integrity Plot was completed within an iteration of the Modification 1 (Mod-1 Project) Development Corridor or Mod-1 Amendment 1 (RTS Project) Development Corridor, relevant at the time of the survey being completed, in accordance with the BAM (DPIE, 2020). The Mod-1 Amendment 1 (RTS Project) facilitated avoidance and minimisation measures as well as ongoing design updates, and the consequential changes to the Development Corridors between the Modification 1 (Mod-1 Project) and the Mod-1 Amendment 1 (RTS Project) resulted in multiple BAM Vegetation Integrity Plots being located outside of the Project Development Corridor.

The original 85 BAM Vegetation Integrity Plots completed for the Modification 1 (Mod-1 Project) satisfied the minimum BAM Vegetation Integrity Plots survey requirements of the BAM (DPIE, 2020). A submission was made by BCS on the Modification 1 (Mod-1 Project) BDAR (Umwelt, 2022) that the minimum BAM Vegetation Integrity Plots survey effort was required to be based on the proposed impacts on vegetation zones within each applicable IBRA-subregion. The justification behind this submission was that PCT benchmarks can vary between IBRA-subregions. There is, however, no requirement or stipulation within BAM (DPIE, 2020) for this to occur.

Despite this, as part of the Mod-1 Amendment 1 (RTS Project), an additional 41 BAM Vegetation Integrity Plots were completed. These additional BAM Vegetation Integrity Plots sought to address the submission made by BCS, as well as capturing revisions to the Indicative Development Footprints. Despite best efforts made during extensive field survey programs during the Mod-1 Amendment 1 (RTS Project), resulting in the total of 126 BAM Vegetation Integrity Plots being completed across the whole Project (combined), there remained a small shortfall of nine BAM Vegetation Integrity Plots. The small shortfall occurred across just seven vegetation zones, detailed in Table 2.3 of the Mod-1 Amendment 1 (RTS Project) BDAR (Umwelt, 2023).

While the BAM (DPIE, 2020) requires PCT benchmarks to be used to account for any shortfalls in BAM Vegetation Integrity Plots, Umwelt applied an alternate approach and justification as described in Table 2.3 of the Mod-1 Amendment 1 (RTS Project) BDAR (Umwelt 2023). In summary, the alternative approach included:

- The use of BAM Vegetation Integrity Plots from the neighbouring IBRA-subregion, ensuring the consistent IBRA-region to limit the degree of benchmark variation.
- Multiple BAM Vegetation Integrity Plots were used, even in instances where just one BAM Vegetation Integrity Plot was required, to avoid selection bias.
- Duplication of the highest scoring (vegetation integrity scores) BAM Vegetation Integrity Plot in circumstances where none had been completed in an alternative IBRA-subregion.

This alternate method applied for the Mod-1 Amendment 1 (RTS Project) is considered to be ecologically sound. When impacts for the RTS Project are considered as a single assessment of impact (i.e. not breaking the impacts up by IBRA-subregion) the minimum number of BAM Vegetation Integrity Plots has been satisfied in accordance with BAM (DPIE, 2020). Umwelt has satisfied the shortfalls using real BAM Vegetation Integrity Plot data, based on surveys for the Project, in vegetation known to be consistent PCTs and condition classes. This is considered to present far more representative data for the RTS Project compared with the use of benchmark data. Additionally, to avoid any selection bias, Umwelt used additional BAM Vegetation Integrity Plot data in all circumstances where they were available even in situations where there was a shortfall of just a single BAM Vegetation Integrity Plot.

The RTS Project has not currently used PCT benchmark data in situations where there are shortfalls in BAM Vegetation Integrity Plots based on a breakdown of impacts per IBRA-subregion. While the current approach is not strictly in accordance with BAM (DPIE, 2020), it is considered ecologically appropriate and fit for purpose, particularly since the need to achieve minimum number of BAM Vegetation Integrity Plots based on a breakdown of impacts within the IBRA-subregions is also not prescribed in the BAM (DPIE, 2020).

Regardless, the Proponent has committed to incorporate the use of PCT benchmark data when it reaches the next stage of detailed design and will therefore need to undertake the process of confirming credit liabilities of the Project based on the pre-construction footprint, which will in turn trigger the need to amend the BAM – Credit Calculator.

5. Further avoidance should be proposed to reduce SAII impacts to Box Gum Woodland

5.2.1 The consent authority should note BCS advice in relation to SAII impacts to box gum woodland CEEC when considering the adequacy of avoidance and minimisation to biodiversity impacts, proposed conditioning of the project, and potential project approval.

The Proponent has consulted with BCS and DPHI to determine a set of additional and appropriate measures that the Proponent has committed to implement as a targeted effort to reduce the risk of serious and irreversible impacts (SAII) to NSW Box Gum Woodland CEEC and in doing so protect additional areas of Commonwealth Box Gum Woodland CEEC over and above what is required under the Biodiversity Offsets Scheme (BOS).

In consultation with BCS and DPHI, the Proponent has developed a draft proposal to conserve in perpetuity additional areas of NSW and Commonwealth Box Gum Woodland CEEC equivalent to the quantum of Low and Moderate-Good condition class impacted by the Mod-1 Amendment 1 (RTS Project) (SAII Measures). The Proponent's draft proposal for SAII Measures was provided to BCS and DPHI for their consideration on the 14 March 2024 and is provided in Appendix A of the Addendum BDAR (refer to **Appendix 3**).

Considering the estimated impacts to Commonwealth Box Gum Woodland CEEC associated with the Indicative Development Footprint – Wind Farm and Indicative Development Footprint – Public Road Upgrades only, this would equate to an additional 217.5 ha of NSW Box Gum Woodland CEEC and an additional 13.9 ha of Commonwealth Box Gum Woodland CEEC that would be conserved in perpetuity as part of the SAII Measures. It should be noted that, as agreed in consultation with BCS, the additional measures have focused on the Indicative Development Footprint – Wind Farm and Indicative Development Footprint – Public Road Upgrades as it is likely that the External Transmission Line assessed as part of the Mod-1 Amendment 1 (RTS Project) Project will not proceed.

The mechanism to conserve in perpetuity the additional areas of Box Gum Woodland CEEC will be via the generation and retirement of relevant ecosystem credits from a biodiversity stewardship agreement (BSA) site that will be registered on title as required under the BC Act (SAII Credits). The SAII Credits cannot be traded on the credit market or retired against the Project, and will simply be retired, or in effect, donated. The SAII Credits are additional to the credits required to offset unavoidable impacts to Box Gum Woodland CEEC under the BOS.

Forming part of the BSA site, the additional areas of Box Gum Woodland CEEC to be conserved will be subject to the standard active management activities relevant to the specific management zones specified in the relevant Biodiversity Stewardship Site Assessment Report (BSSAR) within which the relevant ecosystem credits have been generated.

It is intended that the SAII Credits will be generated from a BSA site that is under the Proponent's control. While the Proponent is establishing new BSA sites at various locations to offset unavoidable impacts associated with the Project, it is intended that the SAII Credits will be generated from the proposed Nangarah BSA site, located near Barraba approximately 80 km north of Tamworth within the Peel IBRA subregion. The Nangarah BSA site is a highly suitable location to deliver the SAII Measures as the Proponent has secured land tenure and has full control over how SAII Credits can be generated within the BSA site. In addition, there is a mix of vegetation classes with evidence of natural regeneration and there are substantial areas of Box Gum Woodland CEEC of equivalent condition to the Low and Moderate-good condition vegetation proposed to be impacted by the Mod-1 Amendment 1 (RTS Project).

The Proponent will generate at the BSA site the required ecosystem credits that are aligned with the NSW and Commonwealth Box Gum Woodland CEEC in a 'like-for-like' manner with the vegetation impacted by the Project. The quantity of ecosystem credits to be generated will be calculated according to the area of actual impact to Box Gum Woodland CEEC by the Project.

To maximise the opportunity to reduce impacts while balancing the need to deliver SAII Measures in a timely manner, the Proponent proposes to retire the relevant SAII Credits in a staged manner upon completion of ground disturbing works for each major milestone at the Project. Because the SAII Credits will be generated from within specific vegetation zones and management zones within the BSA site, the Proponent intends to withhold the SAII Credits until the actual area of impact to Low and Moderate-good condition Box Gum Woodland CEEC can be accurately calculated.

As the additional areas of NSW Box Gum Woodland CEEC to be conserved as part of the SAII Measures will form part of the broader BSA site, those additional areas will be subject to the standard active management actions specified for the relevant management zones within the BSSAR for the BSA site. No active restoration management activities are proposed to be implemented. The required management actions are expected to involve the following:

- wildlife friendly fencing
- feral animal control
- weed control
- ecoburns, when considered appropriate to improve biodiversity value
- monitoring.

The additional and appropriate measures relating to NSW Box Gum Woodland CEEC are considered to adequately mitigate the potential SAII on the entity for the Mod-1 Amendment 1 (RTS Project). This initiative by the Proponent is near the first of its kind within the renewables industry of NSW, or any other industry in NSW for that matter, demonstrating the degree to which the Proponent is willing to mitigate unavoidable impacts to biodiversity values. Consultation on the additional and appropriate measures presented above has received positive feedback from BCS and NSW DCCEEW.

Further information on the Proponent's draft proposal to implement the abovementioned SAII Measures is contained in the BOS prepared by the Proponent, Wedgetail and Umwelt (refer to Appendix B of **Appendix 3**). The Proponent will continue to consult with BCS and DPHI to determine the SAII Measures that shall apply as part of the RTS Project.

6. Clarification of land categorisation is required

6.1.1 A decision matrix should be provided as an appendix to the BDAR to explain the reasoning for all land categorisation outcomes.

Section 2.1 of the Mod-1 Amendment 1 (RTS Project) BDAR (Umwelt, 2023) clearly presents the methods by which Category 1 Exempt Land has been identified and mapped as part of the Project. The steps Umwelt followed to prepare and assess the Category 1 Exempt Land mapping of the Project are also provided in Table 6.1 of **Appendix 3.**

As described in Section 1.4 of the Mod-1 Amendment 1 (RTS Project) BDAR (Umwelt, 2023) the Project Boundary, and region more broadly, is dominated by primary agricultural land on the valley floor and low rises, with cropping being the dominant activity. While agricultural practices extend onto the steeper slopes and tabletops, cropping is replaced with stock grazing, including cattle, sheep, and goats. Large patches of remnant vegetation are predominantly restricted to public land (including road reserves and conservation areas), upper slopes and gullies. Agricultural land use has dominated the local region historically. These practises have resulted in the extensive clearing of native vegetation, and those patches that do persist have been permanently degraded.

Generally, the Project has limited proposed disturbances on the valley floor landscapes and land commonly associated with Category 1 Exempt Land (or facilitating land use practises) including but not limited to access points, flat access tracks, the TWA Facility and other associated infrastructure which support only a

small proportion of the proposed Project. The highest proportion of proposed Disturbance Area for the Project is associated with the mid and upper slopes and tabletops where Category 1 Exempt Land is less commonly associated. This is consistent with the outcomes of the Category 1 Exempt Land mapping assessment for the Mod-1 Amendment 1 (RTS Project), with small proportions of the Mod-1 Amendment 1 (RTS Project) meeting the definition of Category 1 Exempt Land. The Mod-1 Amendment 1 (RTS Project) mapped 504.8 ha (5.8%) of Category 1 Exempt Land within the Development Corridor, of which 68.5 ha occurs in the Indicative Development Footprints and is proposed to be impacted by the Mod-1 Amendment 1 (RTS Project). This represents just 3.8% of the whole Indicative Development Footprint.

7. Assessors must not identify native vegetation as a derived PCT

7.1 Vegetation Zone 3 should be reassessed and assigned as the parent PCT from which the derived PCT has developed.

Vegetation Zone 3 has been reassigned to the PCT it was derived from and updated throughout the BDAR as either PCT 483 (Zone 17) or PCT 488 (Zone 12).

No justification has been provided for reallocating PCT 395 to PCT 483 and PCT 488. BCS requires further justification for the allocation of these PCTs (refer to Issue 9).

The process of PCT allocation and assessment for the Mod-1 Amendment 1 (RTS Project) has been completed in recognition of the Approved Project, consistent with Schedule 3, Condition 19(a) of Development Consent SSD 6696.

As described in Section 2.4.8 of the Mod-1 Amendment 1 (RTS Project) BDAR (Umwelt, 2023), the PCTs assessed for the Mod-1 Amendment 1 (RTS Project) considered those presented in the Biodiversity Assessments (NGH Environmental 2013a, 2013b, and 2017) and Determination Assessment Report (DPIE, 2018) that were prepared for the Approved Project. This approach was taken in recognition of the extensive field surveys and regulatory review/assessment that were completed as part of that approval. Field surveys completed by Umwelt as part of the Mod-1 Amendment 1 (RTS Project) throughout the Development Corridor considered these PCTs and ensured they were accurately assigned and appropriate. PCT allocation was updated where appropriate to do so, a process which was based on the analysis of data collected as part of the extensive BAM Vegetation Integrity Plot program. Table 2.5 of the Mod-1 Amendment 1 (RTS Project) BDAR (Umwelt, 2023) summarises the outcome of PCT analysis, including consideration of PCTs of the Approved Project against vegetation identified and surveyed by Umwelt as part of the Mod-1 Amendment 1 (RTS Project).

Regardless of the above, each PCT described in the Mod-1 Amendment 1 (RTS Project) BDAR (Umwelt, 2023) was assessed against the Vegetation Information System Classification Database profiles for each possible PCT in relation to the floristic, structure, soil, landform and distribution details. Table 7.1 of the Addendum BDAR (refer to **Appendix 3**) provides a summary of PCT Analysis completed for the Mod-1 Amendment 1 (RTS Project) BDAR, providing clear justification as to how and why Umwelt assessed the PCTs.

8. Inclusion of vegetation plots outside the project footprint must be justified

8.1.1 Where vegetation plots are not located in the project footprint, justification must be provided, including evidence that the plot is in the correct PCT and vegetation zone.

Of the total 126 BAM Vegetation Integrity Plots that have been completed for the Mod-1 Amendment 1 (RTS Project), all occur within the Project Boundary, 86 occur within the Development Corridor and 55 occur within the Indicative Development Footprints. The 40 BAM Vegetation Integrity Plots that were

completed within the Project Boundary but outside of the Development Corridor were a result of Project design changes, impact avoidance and minimisation measures, and consequential changes to the Development Corridor (as described in Section 4.1 of the RTS BDAR (Umwelt, 2023)).

The overarching justification for the use of those BAM Vegetation Integrity Plots that occur outside of the Development Corridor is that all BAM Vegetation Integrity Plots were specifically and deliberately completed in the target PCT and condition class within the iteration of the Development Corridor current at the time of the surveys. This ensured the vegetation surveyed was in fact consistent with the PCT and condition classes impacted by the Project. Further, any decision to omit already completed BAM Vegetation Integrity Plots from the biodiversity assessment of the Project may be perceived as biased. Further detailed plot analysis is provided in Section 4.3.3 of the BDAR Addendum (refer to **Appendix 3**).

9. Further justification is required in the BDAR regarding the selection of PCTs
9.1.1 Further justification should be provided to BCS to demonstrate why PCTs were selected.

As discussed above in response to issue 7, the process of PCT allocation and assessment for the Mod-1 Amendment 1 (RTS Project) has been completed in recognition of the Approved Project, consistent with Schedule 3, Condition 19(a) of Development Consent SSD 6696.

PCT allocation was updated where appropriate to do so and Table 2.5 of the Mod-1 Amendment 1 (RTS Project) BDAR (Umwelt, 2023) summarises the outcome of PCT analysis, including consideration of PCTs of the Approved Project against vegetation identified and surveyed by Umwelt as part of the Mod-1 Amendment 1 (RTS Project). Table 7.1 of the Addendum BDAR (refer to **Appendix 3**) provides a summary of the PCT Analysis completed for the Mod-1 Amendment 1 (RTS Project) BDAR, providing clear justification as to how and why Umwelt assessed the PCTs.

11. Further justification is required to support partial loss when calculating vegetation integrity scores
11.1.1 Further justification should be provided for the criteria used to determine partial loss of vegetation integrity scores or assume total loss.

In relation to partial loss assessment, Section 8.1.1.2 of the BAM (DPIE, 2020) specifically states that 'future values of the attributes may be amended to reflect the impacts from partially clearing a vegetation zone, including areas such as…easements'. However, there is no guidance or methodology as to how accredited assessors should do this.

The original partial loss assessment applied for the Modification 1 (Mod-1 Project) BDAR (Umwelt, 2022) was consistent with the partial loss method that was utilised by Umwelt in the BDAR that was prepared for the application to modify the development consent for the Proponent's Rye Park Wind Farm project (SSD-6693-Mod-1), located near Yass, NSW. The modification for the Rye Park Wind Farm project was approved in 2020 and the project is currently nearing completion of construction. This method of assessing partial loss was not supported by BCS for the Liverpool Range Wind Farm Modification 1 (Mod-1 Project), with a submission being made on the Modification 1 (Mod-1 Project) BDAR (Umwelt, 2022). The justification for this submission from BCS was the different IBRA-subregions and PCTs compared to Rye Park Wind Farm, therefore suggesting that the response of vegetation following partial clearance for the Liverpool Range Wind Farm Modification 1 (Mod-1 Project) will not be consistent to that of vegetation partially cleared for Rye Park Wind Farm.

As described in Section 5.1.2. of the Mod-1 Amendment 1 (RTS Project) BDAR (Umwelt, 2023), an amended partial loss assessment was applied which was consistent with the methodology applied in the BDAR that was prepared by WSP (2023) for the EnergyCo CWO REZ Transmission Line Infrastructure project (SSI-48323210). As instructed by BCS during consultation following the BCS submission on the Modification 1 (Mod-1 Project) BDAR, the same assessment method that was used for the EnergyCo CWO REZ Transmission Line Infrastructure project (SSI-48323210) was applied for the Mod-1 Amendment 1 (RTS Project).

As the biodiversity assessment for the EnergyCo CWO REZ Transmission Line Infrastructure project (SSI-48323210) was not publicly available at the time of preparation of the Mod-1 Amendment 1 (RTS Project) submission, Umwelt and the Proponent consulted with EnergyCo to acquire relevant information and spatial files to facilitate the application of a consistent partial direct impact assessment for the Mod-1 Amendment 1 (RTS Project). Umwelt and the Proponent also consulted with BCS and DPHI to discuss the adoption of the direct impact assessment used on the EnergyCo CWO REZ Transmission Line Infrastructure project.

Since the preparation and submission of the Mod-1 Amendment 1 (RTS Project) BDAR (Umwelt, 2023), the original BDAR for the EnergyCo CWO REZ Transmission Line Infrastructure project was exhibited (WSP 2023) (version dated 11 September 2023). Recently EnergyCo submitted a revised BDAR (WSP, 2024) (version dated 18 March 2024) in response to the BCS submission made on the project dated 20 November 2023 (BCS Ref#: DOC23/949619).

A review of both these publicly available BDARs for the EnergyCo CWO REZ Transmission Line Infrastructure Project confirms that the partial loss assessments applied for the EnergyCo CWO REZ Transmission Line Infrastructure project and the Mod-1 Amendment 1 (RTS Project) are consistent. Appendix M of the revised BDAR for the EnergyCo CWO REZ Transmission Line Infrastructure Project (WSP 2024) (version dated 18 March 2024) provides the evidence to support the partial loss assessment, finding that the approach is evidence-based and overly conservative compared to the biodiversity values and conditions that are found to persist in partially cleared vegetation.

As documented in the Mod-1 Amendment 1 (RTS Project) BDAR for the Liverpool Range Wind Farm project (Umwelt, 2023), the application of partial direct impacts within the proposed internal and external transmission lines proposed by the Mod-1 Amendment 1 (RTS Project) is considered appropriate for the nature of proposed impacts.

In the absence of any guidance or published methodology as to how accredited assessors should implement Section 8.1.1.2 of the BAM (DPIE, 2020), the method detailed in Section 5.1.2 of the RTS BDAR (Umwelt, 2023) is considered to be accurate, fit for purpose and in accordance with the BAM (DPIE, 2020). Further it is consistent with the EnergyCo CWO REZ Transmission Line Infrastructure project (SSI-48323210) and in line with BCS advice received during consultation on the Liverpool Range Wind Farm Modification 1 (Mod-1 Project). Overall, the assessment is considered to be an overly conservative approach regarding impacts to biodiversity values within the transmission line easements, that is, the persisting biodiversity values within the partially impacted vegetation within the transmission line easements are expected to be higher than the level assessed as part of the partial loss assessment. This is a position shared and justified in Appendix M of the revised BDAR (WSP 2024) (version dated 18 March 2024) prepared for the EnergyCo CWO REZ Transmission Line Infrastructure project.

13. Further analysis of cumulative impacts of blade strike is required

13.1.1 A detailed analysis of the potential cumulative impact over the life of the project should be provided for all threatened species with a moderate or high-risk rating and non-threatened species where it is known that these species are commonly recorded as casualties at wind farms.

Cumulative impacts have been assessed with respect to 12 wind farms (proposed and approved) in the vicinity of the Mod-1 Amendment 1 (RTS Project). Of the 12 wind farms reviewed for cumulative impacts, nine are located between south and west bearings of the Project Boundary. There are no operational wind farms within 50 km of the Mod-1 Amendment 1 (RTS Project), the nearest being Bodangora Wind Farm approximately 71 km to the west-south-west (refer to Table 9.1 of **Appendix 3**).

A total of 22 species were considered by the Mod-1 Amendment 1 (RTS Project) BDAR with the potential to be impacted by the Project (turbine strike). The resultant risk rating for these species is primarily due to their relative abundance in the Project site, their predicted or observed flight behaviour in the Project site and/or their known susceptibility to blade strike at wind farms in south-east Australia. Of the 22 species assessed, four were assigned a High risk rating, 15 a Moderate risk rating and three a Minor risk rating of being impacted by the Project.

In the absence of a detailed approach to determining cumulative risk endorsed by BCS, the estimates of cumulative risk for each assessed species were determined by reviewing all publicly available information relating to the above-listed 12 wind farms in the broader locality of the Mod-1 Amendment 1 (RTS Project). The desktop review included but was not limited to the ecological assessments prepared during the EIS phase of each wind farm project and monitoring reports completed during the operational phase.

The desktop review aimed to answer the following over-arching questions:

- Was a carcass of this species recorded at an operational wind farm?
- Was this species recorded and/or assessed by other wind farms during the EIS?
- At which other wind farm projects has this species been recorded/assessed or a mortality recorded?

Specifically, the cumulative impact assessment was completed for threatened species with a Moderate or High risk rating (refer to Appendix G of the Mod-1 Amendment 1 (RTS Project) BDAR [Umwelt, 2023]) and protected species, where it is known that these species are commonly recorded as casualties at wind farms as assessed in the Mod-1 Amendment 1 (RTS Project) BDAR. This is consistent with the BCS Submission 13.1.1. The cumulative impact assessment considered the overall risk of the RTS Project as determined by the likelihood and consequence of collision. For detailed results refer to Table 9.3 of **Appendix 3**.

14. The discussion of aerial habitat connectivity does not address the potential for barrier effects and habitat sterilisation

14.1.1 Prescribed impacts should address the potential impacts of turbine spacing and configuration of turbine arrays on:

- *displacement of fauna home ranges*
- *sterilisation of fauna habitat due to avoidance of turbines*
- *disruption of fauna movement patterns*

A detailed comparative analysis has been completed for the proposed wind turbine configuration of the Project and considers the numbers of, and spacings between, turbines proposed by the Approved Project,

Modification 1 (Mod-1 Project) and Mod-1 Amendment 1 (RTS Project) (refer to Table 10.1 of **Appendix 3**). The comparative analysis assessed the minimum, maximum and average separation distances between wind turbines for the Approved Project and subsequent modification iterations.

The separation distance between blade tips was calculated by applying a full circular buffer to each turbine centre point (blade tip outer yaw radius). This is a conservative methodology for the following key reasons:

- The turbine layout is irregular and doesn't follow a grid. Therefore, it is not possible to have all turbines oriented to have a minimum blade tip separation simultaneously.
- Wind direction is variable, and not always perpendicular to the turbine rows.

The analysis has been based on the separation distances between turbine blade tips and assumes that all nacelles[12] are oriented in the same direction and the ridgelines where the turbines are located are perpendicular to the wind direction. This is a very conservative approach and notwithstanding this, assessing separation distance between blade tips provides a much more valuable input to the broader assessment of prescribed impacts than simply assessing separation distances between wind turbine towers.

The analysis placed a full circular buffer equivalent to the proposed indicative blade length around each turbine tower location for the Approved Project and subsequent modification iterations to model the separation distances between blade tips. This is a very conservative assessment given that during operations the turbine blades will, for the most part, be oriented perpendicular to the predominant wind direction. In the case of the Project the predominant wind direction is from the south-east.

In summary, when compared to the Approved Project wind turbine configuration, the Mod-1 Amendment 1 (RTS Project) represents an average increase of 109 m (135%) between wind turbines across all wind turbine clusters. Using the same comparison between the Mod-1 Amendment 1 (RTS Project) and the Modification 1 (Mod-1 Project), the Mod-1 Amendment 1 (RTS Project) represents an average increase of 61 m (117%) between wind turbines across all wind turbine clusters.

In addition to turbine configuration, the analysis (as shown in Table 10.1 of **Appendix 3**) also clearly demonstrates that the Proponent has reduced the number of wind turbines in each of the six wind turbine clusters. These are clear demonstrations of the Proponent being conscious about their wind turbine configuration and seeking to increase the separation between wind turbines as far as practicable.

Umwelt acknowledges the use of existing literature from northern hemisphere wind farm projects which documents varying degrees of behavioural avoidance of some avifauna species to operational wind turbines. BCS noted in their submission on the RTS BDAR that the ecology of "Australian bird species may differ somewhat to those in the northern hemisphere…". Another key distinction from the publications out of the northern hemisphere is that this literature mostly relates to older wind turbine models and out-dated turbine configurations. Umwelt has not identified any recent publications relating to this topic that consider new wind turbine models, nor the current wind turbine configuration of linear based Projects (which are consistent across Australia). The older wind turbine models generally had minimum blade tip heights lower than that of the Mod-1 Amendment 1 (RTS Project); and out-dated turbine configurations included wind turbines in dense grid-based configurations.

[12] A nacelle is a cover that houses all of the generating components in a wind turbine, including the generator, gearbox, drive train, and brake assembly. The nacelle sites above the wind turbine tower and the turbine blades fit into the hub that is connected to the turbine's main shaft which is housed by the nacelle.

Bird species are likely to respond differently to wind turbines for a variety of reasons, including vegetation type, proximity to vegetation, wind turbine parameters and wind turbine configuration. Further, different bird species have different levels of avoidance behaviour to wind turbines, noting that avoidance behaviour can be considered at a number of different scales, being displacement, anticipated avoidance and escape.

While some bird species may demonstrate decreased utilisation within the Mod-1 Amendment 1 (RTS Project) as a result of operational wind turbines, other species may not demonstrate any change in utilisation. It is not possible to ascertain the degree to which bird utilisation will be affected, or affected at all, by the Mod-1 Amendment 1 (RTS Project) until the implementation of the future Bird and Bat Adaptive Management Plan (BBAMP) and analysis of associated results during the operational phase. However, it is likely that those bird species which will be more susceptible to altered utilisation as a result of operation of the wind turbines will be those with a higher tendency to occupy at or near the rotor swept area (RSA).

Importantly, the Mod-1 Amendment 1 (RTS Project) is not proposing a new wind farm project. The existing approval allows for the construction and operation of up to 267 wind turbines. Despite there being intricate modifications to the Project, the Approved Project would be interacting with the same avifauna as that of the Mod-1 Amendment 1 (RTS Project) given the proposed modification does not include a proposal to extend into different locations, landscapes, vegetation, ridgelines etc. It is not considered likely that the Mod-1 Amendment 1 (RTS Project) poses a change in risk of turbine strike to avifauna compared with the Approved Project, despite the changes that are proposed as part of the modification.

A key component of a BBAMP is to compare bird utilisation through the operational monitoring of a project to the baseline bird utilisation. This will be the case for the BBAMP that will be prepared for the Mod-1 Amendment 1 (RTS Project), in consultation with BCS, DPHI and Commonwealth DCCEEW.

The Proponent is committed to enhancing the knowledge within the Australian wind industry relating to the interaction of bird (and bat) species with wind turbines. In recognition of this, as part of the implementation of the BBAMP the Proponent will commit to supporting research focused on the interaction of bird species within the Project Boundary with wind turbines, specifically any avoidance behaviours demonstrated. This is not expected to require additional survey methodologies or programs to those currently expected of the future BBAMP, but instead the data captured will be made available for analysis of both direct and indirect impacts (i.e. to identify if there are substantial changes to the utilisation of avifauna species following the commencement of operation of the Project).

The results of this research will be documented through the necessary reports required as part of the BBAMP.

17. Prescribed impacts on connectivity should be offset

17.1.1 The proponent should consult BCS about strategies for offsetting prescribed impacts.

The total impact of wind turbine strikes upon threatened species is inherently unpredictable in nature. It has been recognised in Section 6.4 of the RTS BDAR (Umwelt, 2023) that offsetting by employing the credit system is unviable for species-credit and ecosystem-credit species due to the inability of generating ongoing and/or regular credits. Therefore, the proposed approach to mitigate prescribed impacts related to wind turbine strike does not rely on credit-based mechanisms under the Biodiversity Conservation Regulation 2017 (BC Regulation 2017). Instead, it involves funding biodiversity conservation actions that directly benefit threatened species or ecological communities. These actions are expected to be equivalent, or close to, the cost of acquiring like-for-like biodiversity credits. Such conservation actions can include but

are not limited to, funding existing research programs, funding of a PhD project, funding of Saving our Species conservation projects, funding of breeding projects, and funding operational mitigation measures to assess the interaction with birds and bats.

Notably, the ancillary rules of the BOS currently do not include this specific offsetting approach for turbine strike or connectivity impacts. Approval for using conservation actions not prescribed by the ancillary rules will require consultation with the BAM policy team. Throughout the development of the Mod-1 Amendment 1 (RTS Project), there has been consultation with BCD, a formal BOS helpdesk ticket submission and consultations with NSW DCCEEW. These consultations have not yet resulted in a finalised offset mechanism strategy however, Umwelt and the Proponent remain keen and interested to participate in any consultation relating to the finalisation of a formal industry wide turbine strike offsetting mechanism.

18. Indirect impacts for rotor swept areas should be offset

18.1.1 Bird and bat utilisation surveys should be continued for five years during the operational phase of the wind farm to determine the full extent of indirect impacts of turbine operations on native vegetation and threatened species habitat.

18.1.2 The BDAR should include a method for calculating biodiversity credits to offset the indirect impacts of turbine operations on native vegetation and threatened species habitat.

18.1.1 Bird and Bat Utilisation Surveys

The BBAMP aims to provide a strategic and systematic approach to the monitoring and mitigation of impacts upon avifauna from the Project. The BBAMP will include requirements to implement pre-construction surveys, ongoing operational carcass monitoring, statistical analysis of the carcass monitoring program and annual reports on the findings.

There are multiple components to the BBAMP, and when each is implemented correctly, it will successfully minimise the negative impacts upon birds and bats from the Mod-1 Amendment 1 (RTS Project). As outlined in the Mod-1 Amendment 1 (RTS Project) BDAR Table 4.6, interim surveys will be undertaken prior to the commissioning of the Project to provide a baseline for ongoing monitoring programs (Umwelt, 2023). These baseline surveys will include Bird Utilisation Surveys, Bat Utilisation Surveys, Targeted Bird Surveys and Avifauna Habitat Assessment. Once the Project enters the operational phase, the BBAMP aims to provide ongoing monitoring for five years. The ongoing monitoring will include consistent Bird Utilisation Surveys and Bat Utilisation Surveys and Targeted Bird Surveys to be repeated seasonally within the first, third and fifth years. Multiple carcass monitoring programs aim to identify and record the ongoing impact from the operational wind farm. In line with BBAMPs for other projects, these programs are expected to include Carcass Search Programs undertaken within the first and second year initially, with potential for the program to be implemented as a five-year program. In addition to this, Carcass Persistence Trials will be undertaken seasonally throughout the first and second year, as well as Carcass Detectability Trials to be undertaken seasonally throughout the first year of operation. Furthermore, throughout the lifetime of the operational phase, the BBAMP is expected to require implementation of an ongoing Incidental Finds Protocol to ensure any carcass or feathers incidentally found by any personnel on site will be formally recorded and reported.

The BBAMP is expected to require that all information accumulated within the monitoring programs be reported annually for the first three years of the program and once following the fifth year of bird and bat monitoring. Following the first year of monitoring throughout the operational phase, the BBAMP will be

reviewed for efficacy and minor changes may be implemented to ensure ongoing success within the program.

18.1.2 Offsets for Indirect Impacts

The indirect impacts of the Mod-1 Amendment 1 (RTS Project) on native vegetation and threatened species habitat are well defined. Indirect impacts specifically relate to the construction of infrastructure and the turbines themselves. As such there are no indirect impacts of turbine operations on native vegetation and threatened species habitat. The mitigation measures for these impacts are documented for all phases of the Project (Umwelt, 2023). The mitigation measures recommended are known to be effective to manage indirect impacts such that there are no residual impacts that require offsetting.

The following wind farms are located within 120 km proximity to the Mod-1 Amendment 1 (RTS Project) and have been reviewed regarding offsetting of indirect impacts: Valley of the Winds Wind Farm, Barneys Reef Wind Farm, Orana Wind Farm, Kyoto Energy Park, Bodangora Wind Farm, Spicers Creek Wind Farm, Piambong Wind Farm, Crudine Ridge Wind Farm, Uungula Wind Farm, Burrendong Wind Farm, Bowmans Creek Wind Farm and Hills of Gold Wind Farm.

Of these projects, the Hills of Gold Wind Farm, located south-east of Tamworth, is proposing to offset the indirect impacts if they cannot be sufficiently mitigated or managed. The remaining projects conclude that they will not result in any indirect impacts associated with the construction or operational phases. This includes the recently approved Bowmans Creek Wind Farm. Each project proposes to implement strategies to manage and mitigate indirect impacts on the environment throughout the construction and operation phases of the project, likely through the preparation and implementation of necessary post approval management plans such as the Biodiversity Management Plan. This approach is consistent with the Mod-1 Amendment 1 (RTS Project).

6.7 Transport for NSW

Additional required information

1. It is noted in Table 19 that there is a statement "TfNSW will deliver the upgrades to the State Road network to facilitate the OSOM movements." EnergyCo will be responsible for the OSOM upgrades, however, Tilt Renewables (LRWF) will be required to undertake the AUL/CHR intersection treatments. The strategic design is required to form part of the TIA (which forms part of the EIS) to ensure that environmental approval (pursuant to Part 4 of the EP and A Act 1979) is obtained for the scope of the AUL/CHR intersection treatments for Vinegaroy Road/Golden Highway intersection.

It is understood that EnergyCo will be responsible for the design and delivery of the Golden Highway and Vinegaroy Road intersection upgrade as part of the broader roll-out of the CWO REZ. EnergyCo and TfNSW will determine the ultimate design of that intersection, which at this stage is understood to be a CHR/BAL intersection treatment. EnergyCo will be responsible for the upgrades necessary to accommodate OSOM deliveries while the Proponent will be responsible for application of the intersection turn treatments.

The strategic designs for the Golden Highway and Vinegaroy Road intersection are provided in Appendix 2 of the Update to the Addendum Traffic Impact Assessment: Temporary Workforce Accommodation Facility (CSPL, 2024) (refer to **Appendix 4**).

2. Clarify if the OSOM upgrades at the intersection of the Vinegaroy Road/Golden Highway intersection are included within the scope for the EIS. It is noted that EnergyCo have advised that the scope of the OSOM upgrades at the project intersection are required to be included within the scope of the EIS.

The strategic designs for the Golden Highway and Vinegaroy Road intersection are provided in Appendix 2 of the Update to the Addendum Traffic Impact Assessment: Temporary Workforce Accommodation Facility (CSPL, 2024) (refer to **Appendix 4**).

3. The vertical and horizontal geometry of this intersection for the Vinegaroy Road/Golden Highway intersection is required to be addressed within the revised TIA to assess whether further works are required to be in addition to the CHR / AUL above to provide a safe arrangement. SISD, ASD etc.

This level of detail will be developed during the detailed design phase and included in post-approval secondary consents.

4. It is advised that the OSOM upgrades should be considered for inclusion within the development application if the timeframes and that the scope of works for the Port to REZ works do not align with the requirements for the OSOM movements for the components for the EnergyCO Port to REZ upgrades.

The Proponent is collaborating with EnergyCo regarding the Project-specific requirements for OSOM upgrades to be undertaken as part of the Port to REZ Memorandum of Understanding between EnergyCo and TfNSW. It is anticipated that the required design approvals and subsequent construction for the Port to REZ road upgrade program will occur in a timely manner to facilitate development of the Project.

5. It is noted that there are further access points (Appendix 2) required to the Golden Highway to facilitate the Electricity Transmission Line work with the Golden Highway Road corridor. No assessment has been undertaken for how safe access will be provided, the traffic volumes associated with these access points, the direction of travel, the design vehicles, Safe Intersection Sight Distance, and no turn warrants assessment has been undertaken for these access points. The Traffic Impact Assessment is required to be updated to address the above points.

The Proponent's preferred connection method for the Project is via the EnergyCo CWO REZ Transmission Line, however the External Transmission Line remains a part of the Approved Project and has been retained as part of the Modification 1 (Mod-1 Project) to provide an alternative connection option in the event that access is not granted via the CWO REZ Transmission Line.

Detailed assessments of the access points with the Golden Highway that would be impacted by transmission line construction (if required) are provided in Section 5 of the Update to the Addendum Traffic Impact Assessment: Temporary Workforce Accommodation Facility (CSPL, 2024) (refer to **Appendix 4**). Additional information on assessment of safe intersection sight distances (SISD) for site access points is provided in **Appendix 9**, in response to a request from DPHI (see **Section 6.1.2**).

6. The Ulan Road/Golden Highway intersection will be utilised for the electricity transmission line it is noted that the TIA has not addressed the traffic impacts and safety of this intersection in accordance with Austroads Guide to Road Design and Austroads Guide to Traffic Management. The capacity analysis of the existing intersection treatments is required to be assessed for this development given the cumulative volumes of traffic associated with the mines and other renewable projects and to understand if the traffic generated with this project will require further intersection treatments.

The Proponents' preferred connection method for the Project is via the EnergyCo CWO REZ Transmission Line, however the External Transmission Line remains a part of the Approved Project and has been retained as part of the Modification 1 (Mod-1 Project) to provide an alternative connection option in the event that access is not granted via the CWO REZ Transmission Line. Ulan Road is a Regional Road and approved B-Double Route. The original traffic impact assessment (Epuron, 2013) and the Mod-1 Traffic Impact Assessment (GTA Consultants, 2022), includes the assessment of the use of Ulan Road for access purposes for construction of the transmission line.

Detailed assessment of the Ulan Road and Golden Highway intersection is provided in Table 5-16 of the Central-West Orana Renewable Energy Zone Transmission Project Technical Paper 13 – Traffic and Transport (WSP, 2023). As previously discussed, EnergyCo will be responsible for the design and delivery of the OSOM enabling works as part of the broader roll-out of the Port to REZ upgrades.

7. Strategic designs may be required as an outcome of the updates to the traffic assessment required within point 4 and 5.

Refer to responses to points 4 and 5 above.

8. The vertical and horizontal geometry of this intersection for the Vinegaroy Road/Golden Highway intersection is required to be addressed within the revised TIA to assess whether further works are required to be in addition to the CHR / AUL above to provide a safe arrangement. SISD, ASD etc.

Refer to response to point 3 above.

9. There is a statement that the light vehicle volumes would be reduced through use of carpooling. Strategies are required to be provided to identify how the commitment to carpooling would be achieved during construction.

The introduction of the TWA Facility will provide improvements to the potential traffic and transport impacts associated with the Project, particularly in relation to workforce light vehicle movements.

The introduction of the TWA Facility does not materially change the number of vehicles movements estimated for the overall Project however, there will be a redistribution of the workforce light vehicle trip-origins and movements. This influences the number and type of turning movements and the required turn treatments at relevant intersections along Vinegaroy Road, and these are described in Section 4.2 of the Update to the Addendum Traffic Impact Assessment: Temporary Workforce Accommodation Facility (CSPL, 2024) (refer to **Appendix 4**).

The inclusion of the TWA Facility at the proposed location is expected to result in a number of benefits from a traffic and transport perspective, including:

- Uses an existing/planned Site Access Point (SAP) – the TWA Facility proposes to utilise an existing driveway to the property and portion of access track where SAP ID#113/114 is proposed as part of the Project to provide access to the D Cluster of wind turbines. The proposed SAP was previously assessed and achieves minimum safe sight distances.

- Road safety, and in particular driver fatigue, will be improved on the wider road network with shorter commutes for workers between the wind farm work fronts and the TWA Facility compared to travelling from home or other accommodation nearer to large regional centres like Dubbo and Tamworth and beyond.

- Reduced congestion during peak times, by not having two-thirds of the construction workforce accessing the Project site via the Golden Highway/Vinegaroy Road intersection which exhibits significantly higher existing traffic volumes compared to the local roads.

A Traffic Management Plan will be developed for the Project (including the TWA Facility), in consultation with relevant government agencies and the local Councils, and further traffic mitigation measures may be considered by the BOP Contractor including the use of shuttle buses to reduce light vehicle movements. This will occur once the BOP Contractor is engaged and the effective management of workforce movements can be negotiated in more detail. Carpooling becomes a more viable strategy for reducing workforce light vehicle volumes if most of the workforce is accommodated at a single location such as a TWA Facility rather than being scattered throughout the region.

Strategic designs

10. The RJA Route Study identifies that hard stand will be utilised for the development where road widening, or intersection improvements proposed to facilitate the OSOM movements. TfNSW identifies the road works associated with the project will be required to be permanent as this route will be utilised for the entirety of the project and therefore the strategic designs will be required for each intersection of the access proposed to be utilised for the project.

11. Strategic designs are required for all the OSOM enabling works identified at each pinch point along the OSOM route as a part of the RTS submission.

As previously discussed, EnergyCo will be responsible for the design and delivery of the OSOM enabling works as part of the broader roll-out of the Port to REZ upgrades.

Pullover and rest areas

12. The pull over and rest area locations along the OSOM route(s) need to be reviewed regarding the suitability and viability to provide sufficient dimensions and access to accommodate the largest OSOM vehicles. Opportunities to provide additional pull over and layby locations should be explored as a part of the updating of the RJA Route Survey.

13. The RJA Route Study is required to be reviewed to ensure sufficient locations for the largest OSOMs are provided along the OSOM route for emergency breakdowns.

14. The RJA Route Survey must be revised to ensure that the pull over and rest area locations for the largest OSOM components are not located at locations that will have conflicts with vulnerable road users.

15. Ownership of the rest areas, pull over and layby locations identified within the RJA Route Survey should be reviewed to ensure landowners consent is provided to permit the use of the rest areas/pull over locations for the delivery of the OSOM movements associated with the project.

16. Rest areas and pull over locations for OSOMs should be reviewed for viability in locations that are impacted by road, rail or other projects occurring along the OSOM route(s).

17. Vertical clearances must be reviewed for any of the pull over and rest area locations along the OSOM route as per the RJA Route Study.

18. Opportunities to provide pull over bays within the vicinity of the site access are required to be explored and the RJA Route Survey, strategic designs and swept paths should be revised based on the outcome of this assessment.

As previously discussed, EnergyCo will be responsible for the design and delivery of the OSOM enabling works as part of the broader roll-out of the Port to REZ upgrades.

Bengalla and Wybong Road

19. Bengalla and Wybong Road are identified as local roads and will be required to be used for the loads that exceed the bridge tolerances for Denman Bridge and therefore the following matters are required to be addressed regarding this route within the RJA Route Study: *a) Provide the detailed scope of work required for Bengalla and Wybong Road to facilitate the OSOM movements, inclusive of the intersections with the classified road network.* *b) Provide swept paths of the largest OSOM components completing the detour via Bengalla and Wybong Road, including the manoeuvring through the intersections with the classified road network.* *c) Road works are in progress with further work planned along Bengalla Road. Further information is required to understand the impacts or impediments the road works along Bengalla Road will have on the OSOM movements for LRWF.*

EnergyCo will be responsible for the design and delivery of the OSOM enabling works on State roads as part of the broader roll-out of the Port to REZ upgrades. While Bengalla and Wybong Road are both identified as local roads, they form part of the Port to REZ OSOM route and as such their use will also be addressed by EnergyCo.

TfNSW road projects along OSOM route

20. Assessment of the impacts of the TfNSW Projects due to the OSOM movements proposed as a part of this project for the identified OSOM route(s) as the Route Study prepared by RJA Route Survey does not appear to have sufficiently addressed the impacts to the TfNSW Projects or the impacts to the proposed OSOM route. The RJA Route Study is required to be revised to address how the OSOM loads could traverse the TfNSW projects along the OSOM route, civil works required to facilitate the laden loads through the TfNSW projects and evidence of consultation with the TfNSW project managers to ensure that access can be provided for the OSOM movements through the TfNSW projects. Hexham Straight Widening Project (HSW) M1 to Raymond Terrace Project (M12RT) Belford to Golden Highway Project (B2GH) Rankin Park to Jesmond – Newcastle Inner City Bypass Mudies Creek Bridge Upgrade 21. The Tarro Bridge is currently restricted to 1 lane as of October 2023. Consideration is required of alternative routes from the Port of Newcastle to the Hunter Expressway, due to the risk associated with the ongoing works for the Hexham Straight Widening Project. 22. Page 163 of 503. The base tower section does not show the overall height. This is a critical dimension as the overall dimensions will be over 5.8m which will result in the requirement to use an alternate route instead of Denman bridge.

As previously discussed, EnergyCo will be responsible for the design and delivery of the OSOM enabling works on State roads as part of the broader roll-out of the Port to REZ upgrades, and this will include consideration of other TfNSW projects.

Regarding the request for the overall height of the base tower section, the base tower section overall dimensions figure has been updated and is included in **Appendix 7**.

Swept paths

23. Swept paths are required to be provided for the largest OSOM vehicle ingress and egressing into the laybys, rest areas and pull over locations along the route. Based on the swept paths prepare strategic designs for any road works or civil works required to facilitate safe access for the largest OSOM vehicles. 24. Provide swept paths demonstrating the approach, manoeuvring and completion of OSOM vehicles moving through key bridges along the OSOM route. 25. Provide swept paths through the known road and rail projects along the OSOM network from the Port of Newcastle to the site access points. 26. Provide swept paths and identify the road works required along the local road network to facilitate the OSOM movements and the interfaces of the local road network with the classified road network along the OSOM route. 27. Parking bays identified in some instances are not long enough to accommodate longest loads. If used by OSOM vehicle for this project where will general freight and OSOM park? Vertical clearances 32. The laden height of the base tower will be 5.9m and there are several structures identified along the route that need to be reviewed to ensure that sufficient vertical clearances to the at-risk bridge and gantry structures. Cross sections are required to be provided which demonstrate that the laden load achieves the sufficient vertical clearances.

EnergyCo will be responsible for the design and delivery of the OSOM enabling works as part of the broader roll-out of the Port to REZ upgrades.

Swept paths have been prepared for the Vinegaroy Road and Golden Highway intersection and are provided in Appendix 2 of the Update to the Addendum Traffic Impact Assessment: Temporary Workforce Accommodation Facility (CSPL, 2024) (refer to **Appendix 4**).

General comments on the RJA Route Study

28. Movement at Industrial Drive/Maitland Road. Is quite disruptive. TfNSW requires further information within the RJA Route Survey of the traffic mitigation measures to minimise the disruptions to the road network at this location, as the current proposal is not sustainable. 37. Movement at John Renshaw Drive onto the Hunter Expressway. High volume road, risk mitigations are not clear to ensure traffic cannot enter the area. Whilst there may not be another option, risk assessment and traffic mitigation measures are required to be conducted and inform the revised RJA Route Survey for LRWF. *29. Loads greater than 3.5m in width would not allow safe passing for overtaking or oncoming vehicles. How is queued traffic managed in this instance and what checks have been done to estimate the likely delay to traffic.* *30. The RJA Route Survey was prepared and completed in 2021, the RJA Route Survey is required to be updated to reflect the current road network for the OSOM Route.* *31. The RJA Route Survey does not mention safety and how movements will be affected/halted in significant weather events i.e., fog heavy downpour. Emergency management procedures will be required to be documented within the revised RJA Route Survey for LRWF.* *32. The cumulative impacts of other OSOM movements occurring at the same time as LRWF along the OSOM route have not been provided within the RJA Route Survey. The RJA Route Survey is required to be revised to address the cumulative impacts in relation to the OSOM. The RJA Route Survey is required to be revised to address the cumulative impacts of LRWF with other SSD approvals needs to be addressed, the potential delays to through traffic from cumulative movements and where the same pull over and layby locations have been identified for the OSOM route.* *33. Average Vehicle Delay must be reviewed as a part of the RJA Route survey to assess the impacts the OSOM vehicles are likely to have along the OSOM route(s), this is pertinent for areas of high traffic volumes along the route and where there is minimal overtaking or pull over locations along the OSOM route(s). The RJA Route Survey is required to be revised to align with the findings and mitigation measures of the Average Vehicle Delay assessment.*

As previously discussed, EnergyCo will be responsible for the design and delivery of the OSOM enabling works as part of the broader roll-out of the Port to REZ upgrades.

Rail comments in relation to the Route Study

34. TIA and Route Study 43. The route maps provided in documents show that the proposed transport route on Golden Highway passes through the non-operational CRN rail line from Sandy Hollow to Merriwa at Maitland Street Gungal NSW. However, Route Study, Transport Assessment and Environmental Impact Statement (EIS) consist of no information about Golden Highway crossing Sandy Hollow to Merriwa Rail Line at Maitland St Gungal NSW. Therefore, the applicant is advised to include this railway crossing location in the EIS, Traffic Assessment and Route Study.
35. The applicant must be aware of construction haulage routes that would cross the CRN railway and always ensure the safety of the rail corridor and rail infrastructure. 44. Inadequate consideration of rail signalling requirements and how they will manage the priority of the rail at multiple LX

As previously discussed, EnergyCo will be responsible for the design and delivery of the OSOM enabling works as part of the broader roll-out of the Port to REZ upgrades.

Electricity Transmission Line and the Golden Highway

36. No poles or towers are to be installed within the TfNSW State Road reserve asset.
37. Poles or Towers to be located outside to Clear Zones.
38. Overhead clearances would need to be in accordance with Utility owner requirements (an Ausgrid example is attached 330kV needs a minimum 14m but higher is always better-see Attachment 2) 39. TfNSW does not support easements across TfNSW State Road reserve asset.

Requirements for transmission line installation within the State road reserves are noted.

Additional information on assessment of safe intersection sight distances (SISD) for site access points is provided in **Appendix 9**, in response to a request from DPHI (see **Section 6.1.2**).

6.8 National Parks and Wildlife Service

1. Noise Impacts in Coolah Tops National Park

The Amendment Report includes an Updated Predictive Noise Impact Assessment (PNIA) as Appendix 8. The PNIA's Appendix F (p 62) includes a map of predicted noise contours and key visitor sites in the park.

NPWS acknowledges that most established visitor sites in the park will experience noise levels below 35dB(A). The exception to this is Coolah Tops Entrance picnic area, located in the extreme west of the park (and which is not labelled on the map in Appendix F). This site is predicted to experience noise levels greater than 35dB(A).

The shapefiles of predicted noise contours have been provided to NPWS and this allows a comparison between the original MOD-1 and the RTS Proposal (see Figure 1 on the last page of this letter). NPWS notes that this appears to show that the removal of the 5 turbines in the windfarm's north-east cluster will not result in any reduction in predicted noise levels that will be experienced in the park.

NPWS believes the PNIA and Amendment Report should have highlighted this situation rather than claiming the removal of the 5 turbines in the north-east cluster will reduce noise impacts to the park.

NPWS disputes the following statement in the PNIA (Section 5, p.39):

A National Park and a person within the park would be a transient visitor and therefore not as sensitive as a person residing permanent at a dwelling.

The following points are made to counter this statement:

− Visitors to national parks come seeking a natural experience and the amenity of their experience in the park would be adversely affected by hearing artificial noises.

− In particular, campers in a park are more sensitive to noise than residents in a dwelling, given the lack of domestic sources of artificial noise (e.g. pumps and other household appliances) and the fact that tents provide far less attenuation of external noise sources than houses or other buildings.

NPWS confirms its preferred position that, ideally, there would be no new sources of artificial noise at visitor sites in a park.

NPWS attended an onsite demonstration of likely sound levels in the park by Tilt's consultant Sonus earlier this year. This demonstration was held on a day when no wind was present, and simulated sound levels of 30dB(A) were clearly audible to all participants.

NPWS does acknowledge that the conditions on that day were atypical and may not accurately reflect potential noise impacts in the park, however, notes that visitors to the park may experience some noise impacts from the Project.

The Predictive Noise Impact Assessments were conducted to satisfy the *Wind Energy: Noise Assessment Bulletin for State significant wind energy development* (the Bulletin) (DPE, 2016). The Bulletin does not contain specific guidelines which would apply to noise levels in locations such as National Parks, however it defines the following criteria:

> *The predicted equivalent noise level (LAeq,10 minute)*, adjusted for tonality and low frequency noise in accordance with these guidelines, should not exceed 35 dB(A) or the background noise (LA90(10 minute)) by more than 5 dB(A), whichever is the greater, at all relevant receivers for wind speed from cut-in to rated power of the wind turbine generator and each integer wind speed in between.*
>
> ** Determined in accordance with SA 2009, Section 4.*

This noise criterion is assigned in the Bulletin to protect against adverse impacts on (permanent) residential amenity (for a residence in a remote setting). It is noted that there are also no Conditions of Consent for the Approved Project which specifically relate to the noise level within the National Park.

In November 2023, the DPE published the *Draft Wind Energy Guideline – Technical Supplement for Noise Assessment* (Technical Supplement) to provide additional guidance for assessing noise impacts of wind energy development in NSW. While acknowledging that the guideline is still in draft form, the Technical Supplement provides the following criterion to manage noise amenity for National Parks:

> *The predicted noise level, adjusted for tonality and low frequency noise in accordance with these guidelines, should not exceed Leq 50 dB(A), at passive recreation areas within National Parks (when in use) for wind speed of 4 m/s or cut-in speed, whichever is the greater* (DPE, 2023).

The Proponent acknowledges the NPWS' preferred position that no new sources of artificial noise are audible at visitor sites in a park, however predicted noise impacts from the Project are considerably lower than the 50 dB(A) amenity noise level recommended by the draft Technical Supplement, therefore further interrogation of noise prediction contours is not warranted.

2. Visual Impacts from viewpoints in Coolah Tops National Park

In the original MOD 1 proposal, it was determined that around 15 turbines would have been visible from Pinnacle Lookout, with the nearest 4.9 km from the park. Although this impact was assessed as likely to be low, this was a new impact on the park compared to the Approved Project which had no turbines visible from this popular lookout.

The Amendment Report's photomontage of views from Pinnacle Lookout [Photomontage 12 in Appendix 6 Updated Visual Impact Assessment (VIA) on page 38 of Appendix C] seems to indicate that the number of turbines visible from the lookout will be reduced to 6. However, the VIA still states (in Section 10.2.3 on p.46) that a total of 15 turbines will still be visible but that these will be in excess of 6 km from the park.

NPWS agrees that, while some visual impact to the south-west of Pinnacle Lookout will remain under the RTS Proposal, the turbines will form a minor element in the overall view as the focus of the lookout is generally towards the north-west.

NPWS is satisfied that the visual impact will be low, however it is noted that the visual impact of the RTS Proposal will still be greater than the Approved Project.

The impact of the Mod-1 Amendment 1 (RTS Project) on views from Pinnacle Lookout is noted, including the increased impact in comparison to the Approved Project. However, as stated in the NPWS submission, the resultant visual impact has been assessed as being low and the turbines will form a minor element in the overall view.

Moir Landscape Architecture Pty Ltd, the author of the Updated VIA report included as part of the Mod-1 Amendment 1 Report (RTS Project), confirmed that only 6 turbines will be visible from Pinnacle Lookout, as shown in Photomontage 12 in Appendix C of the Updated VIA report.

3. Public access to Coolah Tops National Park

NPWS acknowledges that Tilt Renewables is committing to upgrade public roads in the area, including State Forest Road (also known as 'Forest Road') which provides the main access to Coolah Tops National Park. This will be a positive impact of the Project when completed.

NPWS also acknowledges that Forest Road is currently in need of repair between Coolah Creek Road and the park's entrance, particularly on the steeper slopes. A local alert on the NPWS public website advises visitors to the park of this damage.

Further, it is understood public access on this road will need to be restricted during upgrade works and during the construction of the windfarm. NPWS accepts that Tilt is committed to allowing emergency vehicles (including for NPWS firefighters) to use the road during these closures.

To reduce impacts on park visitors and tourism, NPWS urges that road closures and upgrade works are timed to avoid peak periods of visitation to the park, such as school holidays, public holidays and weekend. NPWS would need at least 2 weeks' notice of any scheduled road closures to limit impacts on park management operations and so that park visitors may be alerted of the impending closure. NPWS would also require timely notification of any unscheduled or emergency closures.

NPWS requests to be consulted during the preparation of the traffic management plan and any other construction operational plan that may relate to the access to the park, and that at least 2 weeks' notice of any scheduled road closures is provided to NPWS.

There will be instances where State Forest Road will need to be closed to the public to undertake critical road upgrade works for the Project. These closures will be kept to a minimum and scheduled in a manner to minimise disruptions as far as reasonably practicable for the public. Emergency vehicles will be provided access at all times.

The Proponent is committed to maintaining active communication with NPWS and other affected parties throughout the road upgrade and wind farm construction process. This will include consultation on sections of the Traffic Management Plan and/or Environmental Management Plans that relate to park access.

4. Transmission line corridor through Durridgere SCA

NPWS acknowledges that the modification, as amended, will result in a small deviation of the Project's External Transmission Line to avoid that part of Durridgere SCA located west of Ulan Road.

The Amendment Report flags that the Project's External Transmission Line may further be modified if the Wind Farm connects into the Central-West Orana Renewable Energy Zone (CWO REZ) Transmission Line (SSI-48323210). However, the Amendment Report clarifies that this would only occur if timeframe of the CWO REZ Transmission Line's development happens to coincide within Tilt's timeframes for developing the Liverpool Range Wind Farm Project.

The route proposed by EnergyCo for the CWO REZ Transmission Line is preferred by NPWS as it has a significantly reduced impact on Durridgere SCA compared to the Project's External Transmission Line.

NPWS notes that the EIS for the CWO REZ Transmission Line (SSI-48323210) is currently on exhibition.

While the CWO REZ Transmission Line is yet to be approved, EnergyCo has made a commitment to NPWS that there will only be one major new transmission line through Durridgere SCA.

NPWS requests the External Transmission Line be removed from the Amended Project and the Project required to utilise the EnergyCo CWO REZ transmission connection once approved.

The Proponent's preferred connection method for the Project is via the EnergyCo CWO REZ Transmission Line, however the External Transmission Line remains a part of the Approved Project and has been retained as part of the Mod-1 Amendment 1 (RTS Project) to provide an alternative connection option in the event that access is not granted via the CWO REZ Transmission Line.

It is acknowledged that the EnergyCo CWO REZ Transmission Line is NPWS' preferred easement alignment through Durridgere State Conservation Area (SCA) as it results in reduced adverse impacts to the natural and cultural values of the reserved land.

EnergyCo and the Proponent are currently in discussions to confirm the required access arrangements.

7.0 Updated Project Justification

This detailed Submissions Report has been prepared to provide an analysis of the issues raised in agency and community submissions and to add further clarification on details of the Project where necessary. Following consideration of the submissions received on the Project, additional consultation with government agencies has been undertaken resulting in subsequent changes to minor elements of the Project to further avoid and define impacts (as described in **Section 3.3**).

This section provides an updated assessment of the justification of the Project as a whole, taking into consideration the associated environmental and social impacts and the suitability of the site, to assist the consent authority to determine whether the amended Project remains in the public interest.

7.1 Strategic Context

The Project is a direct response to the NSW and Commonwealth Governments' commitments to transition to renewable electricity generation and forms a key component of the CWO REZ. The National Electricity Market (NEM) needs to rapidly transition to renewable energy to support the NSW Climate Change Policy Framework, as well as the Commonwealth Government's commitments under the Paris Agreement. The Project will materially assist in addressing this by delivering approximately 1,332 MW of renewable energy capacity to the NEM.

The current amendment does not change the overall strategic context of the Project, rather, provides for ancillary development to facilitate the construction of the Project, increasing the financial viability and reducing the associated impacts to the community.

7.2 Economic, Environmental and Social Impacts and Benefits

Consistent with the precautionary principle, the Proponent has completed detailed studies of the existing environment, considered relevant constraints and alternatives, and where applicable used scientific modelling to assess and determine potential impacts, based on:

- assessment of the site characteristics (existing environment)
- engagement with the local community and other stakeholders
- environmental and social risk analysis
- application of the principles of Environmentally Sustainable Development (ESD), including the precautionary principle, intergenerational equity, conservation of biological diversity and valuation and pricing of resources
- expert technical assessment.

The key issues identified were then subject to comprehensive specialist assessment to identify the potential impacts of the Project on the existing environment. These assessments are detailed in previous assessment reports, with further assessment also considered in this report as relevant (refer to **Section 3.2**).

The Project has been designed using an iterative approach. The Proponent has considered and discounted alternative layouts and construction methodologies, including the more intensive configurations of the Approved Project and the Modification 1 (Mod-1 Project). The currently proposed layout (the Mod-1 Amendment 1 (RTS Project) including Mod-1 Amendment 2 (TWA Facility)) is the optimal configuration, balancing the key overarching objectives of efficient delivery of renewable energy with avoidance of areas of significant environmental value and consideration of feedback from the local community and stakeholders including government agencies.

The addition of the TWA Facility will result in some localised impacts, however, will result in an overall reduction in the environmental and social impacts of the project particularly due to reducing impacts on accommodation availability in the region and reducing traffic impacts and risks associated with construction workers accessing the Project site during the construction phase.

Table 7.1 provides a summary of the changes in electricity generation of Modification 1 (Mod-1 Project) and Mod-1 Amendment 1 (RTS Project) compared to the Approved Project. As described in **Table 7.1**, the Mod-1 Amendment 1 (RTS Project) will generate power equivalent to that required by 570,000 households, which represents a 19% increase from Approved Project despite the significant reduction in turbine numbers. It should be noted that the changes in electricity generation for the Project relate to the design changes for Mod-1 Amendment 1 (RTS Project), and have not been affected by the addition of the TWA Facility in Mod-1 Amendment 2 (TWA Facility).

Table 7.1 Summary of electricity generation of amended Project compared to Approved Project

Project element	Approved Project	Modification 1 (Mod-1 Project)	Mod-1 Amendment 1 (RTS Project) and Mod-1 Amendment 2 (TWA Facility)
Maximum number of turbines	267	220 (17% decrease from Approved Project)	185 (31% decrease from Approved Project)
Indicative generation capacity (MW) (approx.)	962 MW[1]	1,320 MW[2] (37% increase from Approved Project)	1,332 MW[3] (39% increase from Approved Project)
Estimated average households powered per year	477,000 households	662,000 households (39% increase from Approved Project)	570,000 households (19% increase from Approved Project)[4]
Estimated greenhouse gas benefits	Approx. 2.1 Mt of CO_2 savings per year, equivalent to the removal of approx. 672,000 cars per year off the roads	Approx. 2.9 Mt of CO_2 savings per year, equivalent to the removal of approx. 933,000 cars per year off the roads	Approx. 2.5 Mt of CO_2 savings per year, equivalent to the removal of approx. 814,000 cars per year off the roads[4]

Notes: *1. Based on an assumed 3.6 MW turbine*
2. Based on an assumed 6.0 MW turbine
3. Based on an assumed 7.2 MW turbine
4. Fewer estimated households than the Modified Project due to the conversion factor of the volume of electricity

The Project will provide approximately 550 full-time positions during peak construction and approximately 40 full-time staff during its operational life, thus providing increased employment opportunities in the region. It will also contribute indirect benefits to local and regional economies throughout the life of the

Project through indirect employment creation, transportation, trade supplies and services, accommodation, catering, retail services, etc.

The direct economic benefits of the Project will also be significant. The Project is expected to result in a direct injection of approximately $6 million per annum to the local community through direct payments to landholders, VPA contributions and other community benefit sharing initiatives to the local community. The Proponent will also be required to make additional payments through the CWO REZ Access Scheme, a portion of which will be invested by the NSW Government for community and employment purposes in the region.

The assessment findings continue to indicate that while there will be environmental and social impacts associated with the Project, all reasonable and feasible efforts have been made to avoid and minimise the predicted impacts and to facilitate efficiency in construction.

The Proponent is committed to the implementation of mitigation measures for each phase of the Project (refer to **Appendix 2**), and there will also be further opportunities to reduce impacts during the detailed design and construction phase of the project, for example through micro-siting of infrastructure at final design.

7.3 Site Suitability

The Project is located within, and forms a key component of the CWO REZ, an area declared by the NSW Government as suitable for renewable energy development. The Proponent and the Project have together been designated by EnergyCo as a Candidate Foundational Generator (CFG) which further demonstrates the critical role that the Project plays in helping the NSW Government deliver on its commitments to increase renewable energy generation and decarbonise the electricity generation system. The Project represents one of the largest approved projects within the REZ, is aligned with the NSW and Commonwealth governments' energy and climate policies and will make a meaningful contribution to achieving the goal of net zero emissions by 2050.

The Project's location has ready connection to the proposed CWO REZ transmission infrastructure and is within an area with identified wind renewable energy source potential. It has access to major transport networks and provides available land at a suitable scale for a viable commercial-scale wind farm project with compatible land zoning.

The current amendment does not change the suitability of the site for the overall Project, as the proposed TWA Facility is located within the Liverpool Range Wind Farm Site Boundary.

7.4 Conclusion

As described above, the Project will contribute significantly to achieving NSW and Commonwealth Governments' commitments to transition to renewable electricity generation and forms a key component of the CWO REZ. The Project will also result in a number of benefits including direct and indirect economic benefits, as well as providing employment opportunities.

The detailed impact assessments undertaken for the Project concluded that while there will be environmental and social impacts associated with the Project, the extent of impact has been minimised through the design process where possible and where impacts are predicted, the Proponent has committed

to management, mitigation and offset measures to address these impacts. With the implementation of the management, mitigation and offset measures proposed by the Proponent, it is considered that the Project would result in a net benefit to the NSW community.

The Project continues to be consistent with the principles of ESD and the modifications and amendments made to the Project since its approval, including the addition of the TWA Facility, only serve to minimise its impacts while enhancing environmental, social and economic benefits.

8.0 References

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