Mallee Wind Farm

Submissions Report

Final

March 2026

Mallee Wind Farm

Submissions Report

Final

Prepared by
Umwelt (Australia) Pty Limited

On behalf of
Spark Renewables Pty Ltd

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Report No.: R01_31894
Date: March 2026

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Executive Summary

Spark Renewables Pty Limited (Spark Renewables) proposes to develop the Mallee Wind Farm (the Project) to generate, store and dispatch electricity to Australia's National Electricity Market (NEM). The Project will contribute to reducing greenhouse gas (GHG) emissions associated with energy generation and provide significant regional economic benefits throughout construction and operations. The Project is located approximately 16 kilometres (km) north east of Buronga in the Murray region of southwestern NSW, within the Wentworth Local Government Area (LGA) and 17 km north east of Mildura, Victoria (VIC).

The Project is a State Significant Development (SSD) under Part 4 of the NSW *Environmental Planning and Assessment Act 1979* (EP&A Act), and an Environmental Impact Statement (EIS) was prepared to adequately address the NSW Department of Planning, Housing and Infrastructure (DPHI) Secretary's Environmental Assessment Requirements (SEARs) provided for the Project. DPHI placed the EIS on public exhibition from Wednesday 13 November 2024 to Tuesday 10 December 2024.

This Submissions Report has been prepared in line with the *State significant development guidelines – preparing a submissions report* (the SSD Submissions Report Guidelines) (DPHI, March 2024) to address the key issues raised in the submissions.

A total of 140 submissions were made in relation to the Project. Of these:

- 20 submissions (in the form of advice) were received from State and Commonwealth Government Agencies and Wentworth Shire Council.
- 120 public submissions were received, including 119 submissions objecting to the Project and one (1) submission in support of the Project.

No Local, State or Commonwealth Government Agencies objected to the Project, however, further information or clarification of aspects of relevant assessment has been requested by some of these agencies whilst others had no comments.

Public submissions have been categorised in accordance with the SSD Submissions Report Guidelines (DPHI, March 2024). Of the 120 public submissions received, there were:

- 14 local submissions (originating within 0 km to 5 km of the Project)
- 16 regional submissions (originating within 5 km to 100 km of the Project)
- 90 broader community submissions (originating more than 100 km from the Project).

This Submissions Report provides responses to all matters raised in public submissions and Government Agency advice, with the exception of traffic-related matters. Traffic-related matters have been addressed through Project design changes, which are assessed in detail within the Amendment Report (Umwelt, 2026), along with specific responses to key issues raised.

Project Overview

The Project will include the installation, operation, maintenance and decommissioning of up to 76 wind turbine generators (WTGs), a single grid scale 100 megawatts (MW) / 200 megawatt hour (MWh) Battery Energy Storage System (BESS), ancillary infrastructure and temporary facilities associated with construction of the Project. The Project will have an installed generation capacity of up to 402 MW.

The key components of the Project include:

- 76 (three (3) blade) WTGs, with a maximum blade length of 91 m and a maximum blade-tip height of 280 metres (m) above ground.
- A single grid-scale 100 MW /200 MWh BESS.
- Permanent ancillary infrastructure including internal access tracks, hardstands, main and collector substations, switchyards, operations and maintenance facilities, underground and overhead electricity transmission lines and poles, telecommunications facilities and utility services, permanent meteorological masts and water storage tanks.
- Temporary facilities including a temporary workforce accommodation (TWA) facility, site offices, amenities, construction compounds and laydown areas, concrete or asphalt batching plants, minor 'work front' construction access tracks, environmental management and monitoring and signage.
- Off-site road works, involving upgrades to the proposed local transport route and establishment of site access points.

The Project also seeks the option for subdivision and boundary adjustments to occur within the Wentworth LGA. These may be required to subdivide lands for the main switchyard connecting into the transmission network, the BESS, and the two (2) on-site collector substation and switchyard facilities, and/or to facilitate other Project ancillary activities (including biodiversity stewardship, land management arrangements, roadworks and access, temporary accommodation, utilities and grid connection) that may be identified and agreed through the detailed design and procurement of the Project, including where this requires creation of lots below the minimum LEP lot size.

The Project has been designed through a comprehensive process that incorporates community and stakeholder feedback, and the findings of environmental and social studies to maximise positive social, economic and environmental outcomes while minimising adverse impacts. Spark Renewables has undertaken extensive engagement with local landholders and other community stakeholders throughout the Project planning and assessment process.

The Project has been designed using an iterative approach incorporating community and other stakeholder feedback from the commencement of engagement undertaken by Spark Renewables in 2022 through the development of the EIS and Submissions Report. This feedback has informed the development of the Project design and proposed mitigation measures as presented in this Submissions Report.

Approval Pathway and Assessment Process

The Project is a SSD as defined under State Environmental Planning Policy (Planning Systems) 2021 and requires development consent under Part 4 of the EP&A Act. **Figure ES 1** below provides an overview of the key stages in the SSD process.

The Project has also been declared a controlled action (2023/09500) under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) based on potential impacts to EPBC Act listed threatened species and communities. The Project will be assessed by the NSW Government under the Bilateral Agreement between NSW and the Commonwealth (Amending Agreement No. 1).

As more than 50 submissions have duly been made by way of objection to the Project, the consent authority for the development application is the Independent Planning Commission of NSW (IPC). It is expected that DPHI will now assess the Project and document its findings in an Assessment Report which will be provided to the IPC. The IPC will then consider the Project and decide whether to approve the Project (subject to conditions) or refuse the Project.

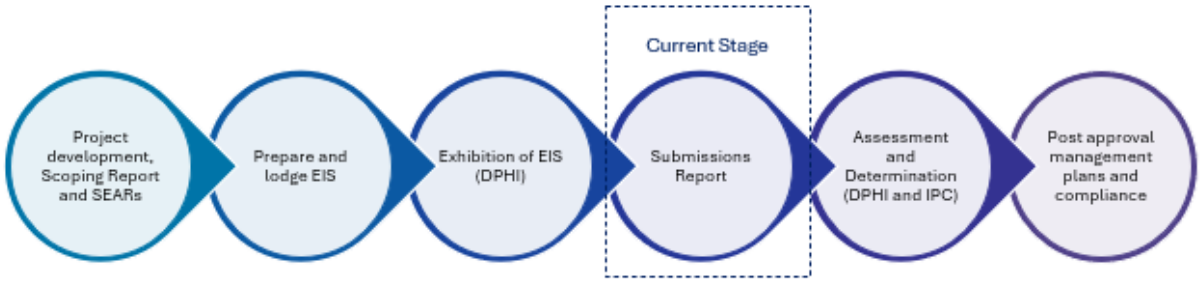


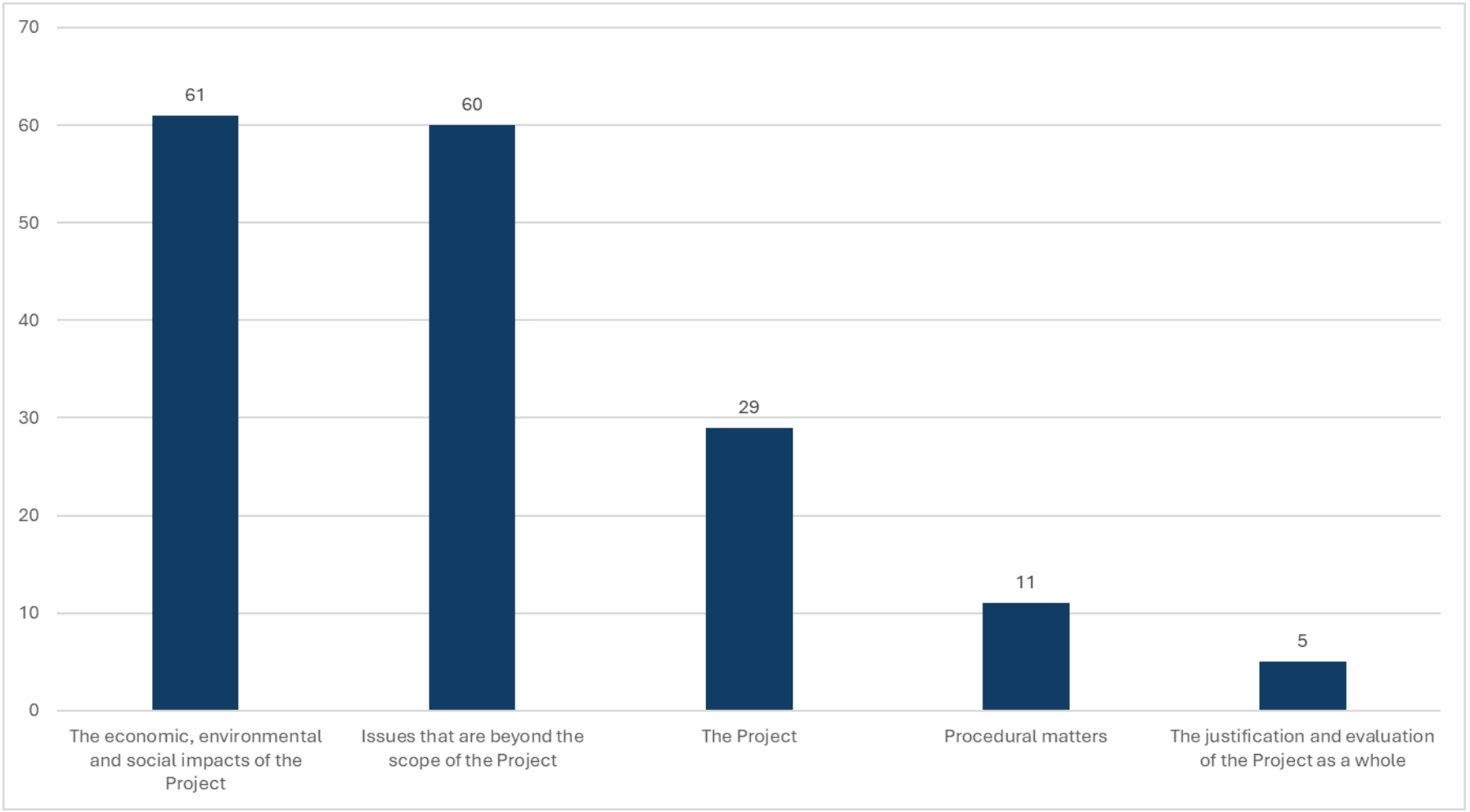
Figure ES 1 Assessment Process

Key Issues Raised

Of the 120 public submissions that were received, 119 submissions objected to the Project and one (1) submission expressed support for the Project. Public submissions (both in objection and in support) raised a total of 36 issues, which were separated into five (5) categories in accordance with the SSD Submissions Report Guidelines as shown in **Graph ES 1** and **Table ES 1** below.

As the Project is aligned with the NSW Electricity Strategy and Electricity Infrastructure Roadmap and involves the establishment of a wind farm within an area specifically identified by the NSW Government as being suitable for renewable energy development (including wind farms), issues raised in relation to renewable energy development or wind farm projects generally are considered to be broader policy issues beyond the scope of the current Project.

The majority of public submissions raised issues which were categorised as being beyond the scope of the Project. A total of 60 public submissions (representing 50% of the total submissions or 50% of objections) raised broader policy issues beyond the scope of the Project.



Graph ES 1 Breakdown of Public Submissions by Category

Table ES 1 Analysis of Issues Raised in Public Submissions

Category	No. of Issues Raised Within This Category	No. of Submissions Raising Submissions in this Category[1]	% of Public Submissions Raising Issues in this Category[2]	Key Issues Raised in Submissions
The Project (e.g. the Project Area, the physical layout and design, key uses and activities, timing)	4	29	24%	• 28 submissions commented on the unsuitability of the site for the Project, of which: ○ 19 submissions suggested the site was unsuitable due to distances to towns/dwellings ○ 13 submissions suggested the site was unsuitable due to distances to national parks ○ Three (3) submissions suggested the site was generally unsuitable. • One (1) submission commented on the project design.
Procedural matters (e.g. level or quality of engagement, compliance with the Secretary's Environmental Assessment Requirements (SEARs), identification of relevant statutory requirements)	3	11	9%	• Seven (7) submissions commented on the level or quality of community engagement undertaken by Spark Renewables for the Project • Six (6) submissions commented on the extent to which the EIS considered relevant policy and statutory requirements and the Project SEARs • Three (3) submissions commented on the public exhibition process.
The economic, environmental and social impacts of the Project (e.g. the economic, environmental and social impacts of the Project, including amenity, air, biodiversity, heritage)	14	61	51%	• 33 submissions commented on biodiversity impacts • 24 submissions commented on social and economic impacts • 14 submissions commented on visual impacts. • 11 submissions commented on bushfire risks. • Ten (10) submissions commented on decommissioning and waste impacts

Category	No. of Issues Raised Within This Category	No. of Submissions Raising Submissions in this Category[1]	% of Public Submissions Raising Issues in this Category[2]	Key Issues Raised in Submissions
				• Nine (9) submissions commented on water impacts • Nine (9) submissions commented on noise impacts • Nine (9) submissions commented on traffic impacts • Seven (7) submissions commented on human health risks • Six (6) submissions commented on agricultural impacts • Four (4) submissions commented on cumulative impacts • Two (2) submissions commented on heritage impacts • Two (2) submissions commented on air quality and greenhouse gas. • One (1) submission commented on aviation safety.
The justification and evaluation of the Project as a whole (e.g. consistency of the Project with Government plans, policies or guidelines)	2	5	4%	• Five (5) submissions commented on strategic planning considerations • Two (2) submissions commented on the capacity of the South West Renewable Energy Zone (REZ).
Issues that are beyond the scope of the Project (e.g. broader policy issues or not relevant to the Project)	11	60	50%	• 25 submissions provided commentary on the reliability and/or suitability of renewable energy • 20 submissions commented on general impacts to rural and regional communities • 20 submissions provided political commentary • 18 submissions commented on general impacts to biodiversity

Category	No. of Issues Raised Within This Category	No. of Submissions Raising Submissions in this Category[1]	% of Public Submissions Raising Issues in this Category[2]	Key Issues Raised in Submissions
				• 14 submissions commented on general contamination risks • 12 submissions raised scepticism regarding the economic benefits of renewable energy development generally • 11 submissions commented on general decommissioning or waste impact • Nine (9) submissions commented on general impacts to human health and safety • Eight (8) submissions commented on general impacts to agricultural land • Seven (7) submissions raised general bushfire risks • Five (5) submissions commented on general impacts to land and water.
Total	**35**	**-**	**-**	

[1] As a single submission may raise issues across multiple categories, the total in this column exceeds the total of 120 public submissions.

[2] Percentages are rounded to the nearest whole number. As a single submission may raise issues across multiple categories, the totals in this column exceeds 100% overall.

Actions Taken Since Exhibition

Following the exhibition of the EIS, Spark Renewables has:

- made refinements to the Project, including commitments to implement additional mitigation measures, in part to address issues raised in submissions
- undertaken further engagement with the community, Government Agencies and key stakeholders
- revised or made updates to select specialist assessment reports in response to submissions
- undertaken a detailed review and changes to the Project's oversize, overmass transport route and Revised Transport Impact Assessment (TIA) which are outlined separately in an Amendment Report (Umwelt, 2026).

Detailed responses to all issues raised in agency and public submissions are provided within the Submissions Report.

Project Need

The Project directly supports both Commonwealth and NSW renewable energy and decarbonisation objectives:

- At the federal level, the Australian Government has committed to reducing greenhouse gas emissions by 43% below 2005 levels by 2030 and achieving net zero emissions by 2050, underpinned by a target of 82% renewable electricity by 2030 (Cth DCCEEW, 2025).
- In parallel, NSW has set its own legislated targets of net zero emissions by 2050 and a 70% reduction below 2005 emissions by 2035, alongside Renewable Energy Zone and firmed renewables deployment goals (NSW Climate Energy Action, 2026).

The Project will deliver 402 MW of new wind capacity by 2030 and will contribute materially to replacing retiring coal-fired generation in the NEM, increasing the share of low-cost, zero-emissions electricity needed to meet both state and federal targets while supporting energy security and affordability for NSW consumers.

The Project will also deliver a range of social and economic benefits to NSW and to regional and local communities as illustrated in **Figure ES 2** below.

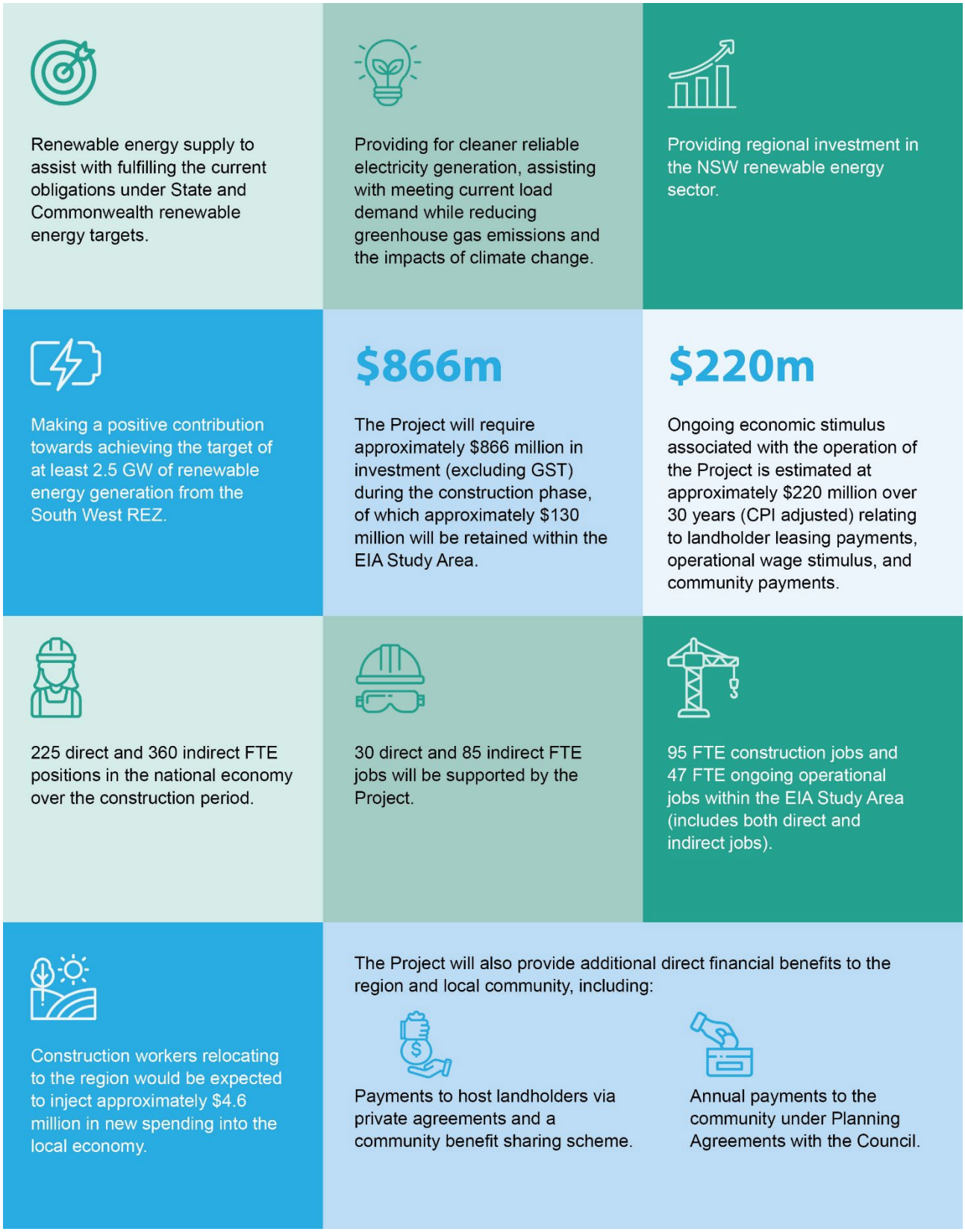


Figure ES 2 Project Benefits

Abbreviations and Definitions

Abbreviation	Definition
ACHA	Aboriginal Cultural Heritage Assessment
AIA	Aviation Impact Assessment
BAM	Biodiversity Assessment Method
BBUS	Bird and Bat Utilisation Survey
BC Act	NSW *Biodiversity Conservation Act 2016*
BCD	Biodiversity and Conservation Division [former]
BCS	Biodiversity, Conservation and Science [former]
BDAR	Biodiversity Development Assessment Report
BSAL	Biophysical Strategic Agricultural Land
CASA	Civil Aviation Safety Authority
CCC	Community Consultative Committee
CEEC	Critically Endangered Ecological Community
Council	Wentworth Shire Council
CPHR	The Regional Delivery Division (RD), South West of the Conservation Programs, Heritage, and Regulation (CPHR) (formerly South West BCD) section of NSW DCCEEW, also known as RD.
Crown Land Act	NSW *Crown Land Management Act 2016*
DA	An application made seeking consent for SSD under Part 4 of the EP&A Act
dB(A)	A-weighted noise or sound power level in decibels
Cth DCCEEW	Commonwealth Department of Climate Change, Energy, the Environment and Water. Also known as Australian Government (AG) DCCEEW.
NSW DCCEEW	NSW Department of Climate Change, Energy, the Environment and Water [current]
DCCEEW Water	NSW Department of Climate Change, Energy, the Environment and Water – Water Group [current]
DPE	NSW Department of Planning and Environment [former]
DPE Water	NSW Department of Planning and Environment Water Group [former]
DPHI	NSW Department of Planning, Housing and Infrastructure [current]
DPIE	NSW Department of Planning, Industry and Environment [former]
EDC	Estimated Development Cost (formerly 'Capital Investment Value')
EEC	Endangered Ecological Community
EIS	Environmental Impact Statement
EL	Exploration Licence
EMF	Electromagnetic Field
EMI	Electromagnetic Interference
EnergyCo NSW	Energy Corporation of NSW
EP&A Act	NSW *Environmental Planning and Assessment Act 1979*

Abbreviation	Definition
EPBC Act	Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*
EPA	NSW Environment Protection Authority
EPL	Environment Protection Licence
GHG	Greenhouse Gas
GW	Gigawatts
Ha	Hectares
HHA	Historical Heritage Assessment
ICNG	Interim Construction Noise Guideline 2009
KV	Kilovolt
LALC	Local Aboriginal Land Council
LEP	Local Environmental Plan
LGA	Local Government Area
LVIA	Landscape and Visual Impact Assessment
MNES	Matter of National Environmental Significance
MW	Megawatt
MWh	Megawatt Hour
NEM	National Electricity Market
NPfI	Noise Policy for Industry 2017
NSW	New South Wales
OSOM	Over-size, over-mass vehicle
PA	Planning Agreement
PCT	Plant Community Type
POEO Act	NSW *Protection of the Environment Operations Act 1997*
Project	Mallee Wind Farm
Proponent	Spark Renewables Pty Limited
REZ	Renewable Energy Zone
RFS	NSW Rural Fire Service
Roads Act	NSW *Roads Act 1993*
SAT	Spot Assessment Technique
SEARs	Secretary's Environmental Assessment Requirements
SIA	Social Impact Assessment
SISR	Social Impact Scoping Report
South West REZ	South West Renewable Energy Zone
SSD	State Significant Development
TBDC	Threatened Biodiversity Data Collection
TEC	Threatened Ecological Community
TfNSW	Transport for NSW
TTIA	Traffic and Transport Impact Assessment
TWA	Temporary Workforce Accommodation

Abbreviation	Definition
Umwelt	Umwelt (Australia) Pty Ltd
WM Act	NSW *Water Management Act 2000*
WRIA	Water Resources Impact Assessment
WTG	Wind Turbine Generator

Key Project Terms

Term	Definition
Ancillary infrastructure	All permanent infrastructure necessary for the construction and operation of the wind farm with the exception of Wind Turbine Generators (WTGs) and battery storage, including but not limited to internal roads, hardstands, main and collector substations, switchyards, operations and maintenance facilities, underground and overhead electricity transmission lines and poles, telecommunications facilities and utility services, permanent meteorological masts and water storage tanks.
Associated dwellings	Dwellings not located on land within the Project Area or hosting infrastructure; however, the Proponent has a negotiated agreement in place with the landholder regarding Project impacts and are therefore associated with the Project. **For Mallee Wind Farm there are no associated dwellings.**
Associated landholder	The owner(s) of an associated dwelling. An associated landholder has reached a private agreement with Spark Renewables in relation to the Project and management of impacts. An associated landholder is distinct from a host landholder in that no Project infrastructure is proposed to be built on the associated landholder's property. **For Mallee Wind Farm there are no associated landholders.**
Battery storage	Compound and technology for storing and discharging energy. Includes the Battery Energy Storage System (BESS), as well as associated buildings, shipping containers and other infrastructure to contain the chosen technology and to connect the battery storage infrastructure with the WTGs, and substations via underground and/or overhead cables.
Benefit sharing	Benefit sharing aims to distribute benefits generated by a project between the Proponent and the community through mutually agreed opportunities such as funding or sponsoring local community initiatives, programs or projects.
Construction	The construction of the Project, including but not limited to the construction of WTGs, battery storage, ancillary infrastructure but excluding pre-construction works.
Decommissioning	The removal of WTGs, battery storage and ancillary infrastructure.
Development Consent	State Significant Development consent to carry out the Project granted by the consent authority as nominated under *the NSW Environmental Planning and Assessment Act 1979* (EP&A Act).
Disturbance Footprint	This is the actual disturbance area required for the Project. The Disturbance Footprint is shown conceptually in **Figure 1.1.** The actual location and extent of the Disturbance Footprint will be determined prior to construction, subject to the micro-siting provisions outlined in the EIS. It includes disturbance associated with the seven (7) proposed permanent meteorological masts but excludes access to these meteorological masts that would be provided via existing farm tracks or cleared agricultural land.

Term	Definition
Ground Disturbance	Activities that cut into the existing ground surface. To avoid any doubt this does not include activities that occur on the ground surface including but not limited to driving vehicles on the ground, parking vehicles, placing infrastructure or materials such as stockpiles on the ground.
Heavy Vehicle	As defined under the Heavy Vehicle National Law (NSW), but excluding light and medium rigid trucks (less than eight (8) tonnes and with no more than two (2) axles) and buses containing more than 12 seats.
Host Landholder	The owner(s) of a host dwelling. A host landholder has reached an agreement with Spark Renewables to host Project infrastructure within their landholdings and in relation to the management of impacts.
Host Dwellings	A dwelling on privately-owned land in respect of which the owner has reached an agreement with Spark Renewables to host Project infrastructure and in relation to the management of impacts.
Internal Access Tracks	Access tracks established and/or upgraded within the Project Area for the purposes of constructing, operating, maintaining and decommissioning the Project, and includes all waterway crossings where located within the Project Area, but does not include off-site road works areas.
Light Vehicle	A car or rigid truck up to eight (8) tonnes gross vehicle mass or a bus containing up to 12 seats.
Local Transport Route	The transport route extending from Sturt Highway/ Carey Street Euston to the Project access points on Arumpo Road, as shown in Figure A.18 in Appendix A of the Amendment Report (Umwelt, 2026).
Micro-siting	This is commonly the process of locating WTGs, battery storage, ancillary infrastructure and temporary infrastructure during detailed design without further approval, providing that certain thresholds are met. In this case, and as a broader Development Corridor is not proposed, these include: • ground disturbance is wholly contained within the Disturbance Footprint. • no WTG is moved more than 100 metres from the relevant GPS coordinates listed in Appendix 3 of the EIS and any ground disturbance is contained within the Disturbance Footprint. • the revised location of the blade of a WTG is at least 50 metres from the canopy of existing hollow-bearing trees; or where the proposed location of the blade of a WTG is already within 50 metres of the canopy of existing hollow-bearing trees, the revised location is not any closer to the existing hollow-bearing trees.
Non-associated landholder	The owner of a non-associated dwelling.
Non-associated Dwelling	A dwelling on privately-owned land in respect of which the owner has not entered into a private agreement with Spark Renewables in relation to the Project's impacts. or A dwelling on privately-owned land in respect of which the owner has reached an agreement with Spark Renewables in relation to the Project's impacts, but the agreement does not cover the relevant impact, or the performance measure for such impact (under that agreement) has been exceeded.

Term	Definition
Off-site Road Works	Proposed upgrades to the local transport route including adjacent to the site access points as described in Appendix 1, Appendix A of the Amendment Report (Umwelt, 2026) and shown in the strategic concept designs in Appendix E of the Revised Traffic and Transport Impact Assessment (Appendix B of the Amendment Report).
Planning Agreement	An offer by a developer to Council to dedicate land, make monetary contributions, or provide any other material public benefit, to be used for or applied toward a public purpose.
OSOM Transport Route	The route associated with the transportation of some Project components (such as wind turbine blades, nacelles and transformers) that would require over-size, over-mass (OSOM) vehicles from the Port of Portland. The OSOM Transport Route extends from the Port of Portland to Sturt Highway/ Carey Street, Euston.
Pre-construction Minor Works	Includes the following activities: • surveys • building/road dilapidation surveys • investigative drilling, excavation or salvage • minor clearing or translocation of native vegetation • establishing temporary site office, compounds and temporary workers accommodation • installation of environmental impact mitigation measures, fencing, enabling works, meteorological masts • flora and fauna investigations and pre-clearing surveys, inspections, specific habitat feature removal and relocation • adjustments to services/utilities, signage etc. including associated vegetation • removal and heritage artefact salvage • off-site road works.
Project	The Mallee Wind Farm
Project Area	The Project Area encompasses all land within and including the Project Boundary.
Project Boundary	The outer boundary of the Project Area. The Project Boundary is the maximum spatial extent of potential land access defined by the boundaries of the host landholder properties (i.e. all agreed lots owned by host landholders).
Proponent	Spark Renewables Pty Limited
Rehabilitation	The restoration of land disturbed by the Project to its former condition, to ensure it is safe, stable, and non-polluting.
Residence	Has the same meaning as a 'dwelling' as defined under the Standard Instrument – Local Environmental Plan, and also includes: • residences that have development consent but have yet to commence or complete construction. • proposed residences that are subject to a development application that has been lodged prior to the DA for the Project but is yet to be determined.

Term	Definition
	• a residence does not include moveable dwellings (i.e. tents, caravans or other portable devices used for human habitation), or any derelict dwelling or dwelling that has been built illegally, as confirmed by the relevant Council.
Substation	A facility in an electrical power system where voltage is transformed from high to low or vice versa, and where power is routed and distributed to various areas. It typically includes transformers, circuit breakers, and other equipment.
Study Area	The specific assessment area adopted for each technical study.
Switchyards	A section within a substation or a standalone facility where electrical power is switched and routed between different transmission lines or equipment. It mainly involves circuit breakers, switches, and busbars for controlling the flow of electricity.
Telecommunications Facility	A telecommunications facility is any part of the infrastructure of a telecommunications network or any line, cable, optical fibre, equipment, apparatus, tower, mast, antenna, dish, tunnel, duct, hole, pit, pole or other structure in connection with a telecommunications network. Telecommunications facilities provide for transmission of voice, data, image, graphic and video information between or among points by wire, cable, optical fibre, microwave, radio, satellite or similar facilities.
Temporary Facilities	Temporary facilities used for the construction, repowering and/or decommissioning of the Project, including but not limited to the temporary workforce accommodation (TWA), site offices, amenities, construction compounds and laydown areas (including stockpiling and materials storage areas, concrete or asphalt batching plants, minor 'work front' construction access tracks, environmental management and monitoring and signage.

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1.0 Introduction

1.1 Project Overview

The Mallee Wind Farm (the Project) will include the installation, operation, maintenance and decommissioning of up to 76 Wind Turbine Generators (WTGs), a single grid scale 100 megawatts (MW) / 200 megawatt hour (MWh) Battery Energy Storage System (BESS), ancillary infrastructure and temporary facilities associated with construction of the Project. The Project will have an installed generation capacity of up to 402 MW.

The key components of the Project include:

- 76 (three (3) blade) WTGs, with a maximum blade length of 91 metres (m) and a maximum blade-tip height of 280 m above ground.
- A single grid-scale 100 MW /200 MWh BESS.
- Permanent ancillary infrastructure including internal access tracks, hardstands, main and collector substations, switchyards, operations and maintenance facilities, underground and overhead electricity transmission lines and poles, telecommunications facilities and utility services, permanent meteorological masts and water storage tanks.
- Temporary facilities including a temporary workforce accommodation (TWA) facility, site offices, amenities, construction compounds and laydown areas, concrete or asphalt batching plants, minor 'work front' construction access tracks, environmental management and monitoring and signage.
- Off-site road works, involving upgrades to the proposed local transport route and establishment of site access points.

The Project also seeks the option for subdivision and boundary adjustments to occur. These may be required to subdivide land for the 330 kilovolt (kV) main switchyard connecting into Project EnergyConnect, the BESS, and the two (2) on-site collector substation and switchyard facilities, and/or other subdivisions that may be required following the detailed design of the Project.

As discussed in **Section 3.1**, the Project has been amended in response to agency submissions and to optimise the construction and operation of the Project. These amendments do not change the key components of the Project as described above, or the Project layout, which is shown in **Figure 1.1**.

The Project has been designed through a comprehensive process that incorporates community and stakeholder feedback, and the findings of environmental and social studies to maximise positive social, economic and environmental outcomes while minimising adverse impacts. Spark Renewables has undertaken extensive engagement with local landholders and other community stakeholders throughout the Project planning and assessment process. The Project has been designed using an iterative approach incorporating community and other stakeholder feedback from the commencement of engagement undertaken by Spark Renewables in 2022 through to the development of the EIS and this Submissions Report, with the design of the Project changing as a result of this feedback as detailed in **Section 3.1**.

1.2 Report Structure

This Submissions Report has been prepared by Umwelt on behalf of Spark Renewables in consideration of the SSD Submissions Report Guidelines (DPHI, March 2024) to address the key issues raised in the submissions.

This Submissions Report provides responses to all matters raised in public submissions and Government Agency advice, with the exception of traffic-related matters. Traffic-related matters have been addressed through Project design changes, which are assessed in detail within the Amendment Report (Umwelt, 2026), along with responses to key traffic-related submissions.

The structure of this Submissions Report is summarised in **Table 1.1** below.

Table 1.1 Submissions Report Structure

Section	Heading	Description
Executive Summary	Executive Summary	Summarises the context and key findings of this Submissions Report.
Section 1.0	Introduction	Briefly summarises the Project and context for this Submissions Report.
Section 2.0	Analysis of Submissions	Provides an analysis of the issues and themes raised in the submissions.
Section 3.0	Actions Since Exhibition	Summarises the actions taken since the exhibition, including further consultation by Spark Renewables, Project refinements and revised specialist assessments undertaken in response to submissions.
Section 4.0	Response to Government Submissions	Provides a detailed response to the issues raised in the Government Agency submissions.
Section 5.0	Response to Public Submissions	Provides a detailed response to the issues raised in the public submissions.
Section 6.0	Updated Project Justification	Provides an updated justification and evaluation of the merits of the Project.
Section 7.0	References	Lists the sources referenced throughout this Report.
Appendix A	Submissions Register	Outlines where issues raised in submissions have been addressed within this Report.
Appendix B	Updated Statutory Compliance Table	Provides an updated summary of statutory requirements relevant to the Project.
Appendix C	Updated Mitigation Measures	Provides an updated, consolidated summary of all proposed mitigation measures for the Project.
Appendix D to **Appendix I**	Revised and supplementary technical studies	**Section 3.3** provides a summary of revised and supplementary assessments undertaken in support of this Submissions Report, with the full assessments provided within the appendices.

Section	Heading	Description
Appendix J	Temporary Workers Accommodation – Concept Plans and Supplementary Assessment	Provides a consolidated summary of assessed impacts associated with the proposed TWA facility.
Appendix K	Summary of assessed impacts to Mallee Cliffs National Park	Provides an updated, consolidated summary of assessed impacts to Mallee Cliffs National Park, superseding the summary in Section 7.3.5 of the EIS.

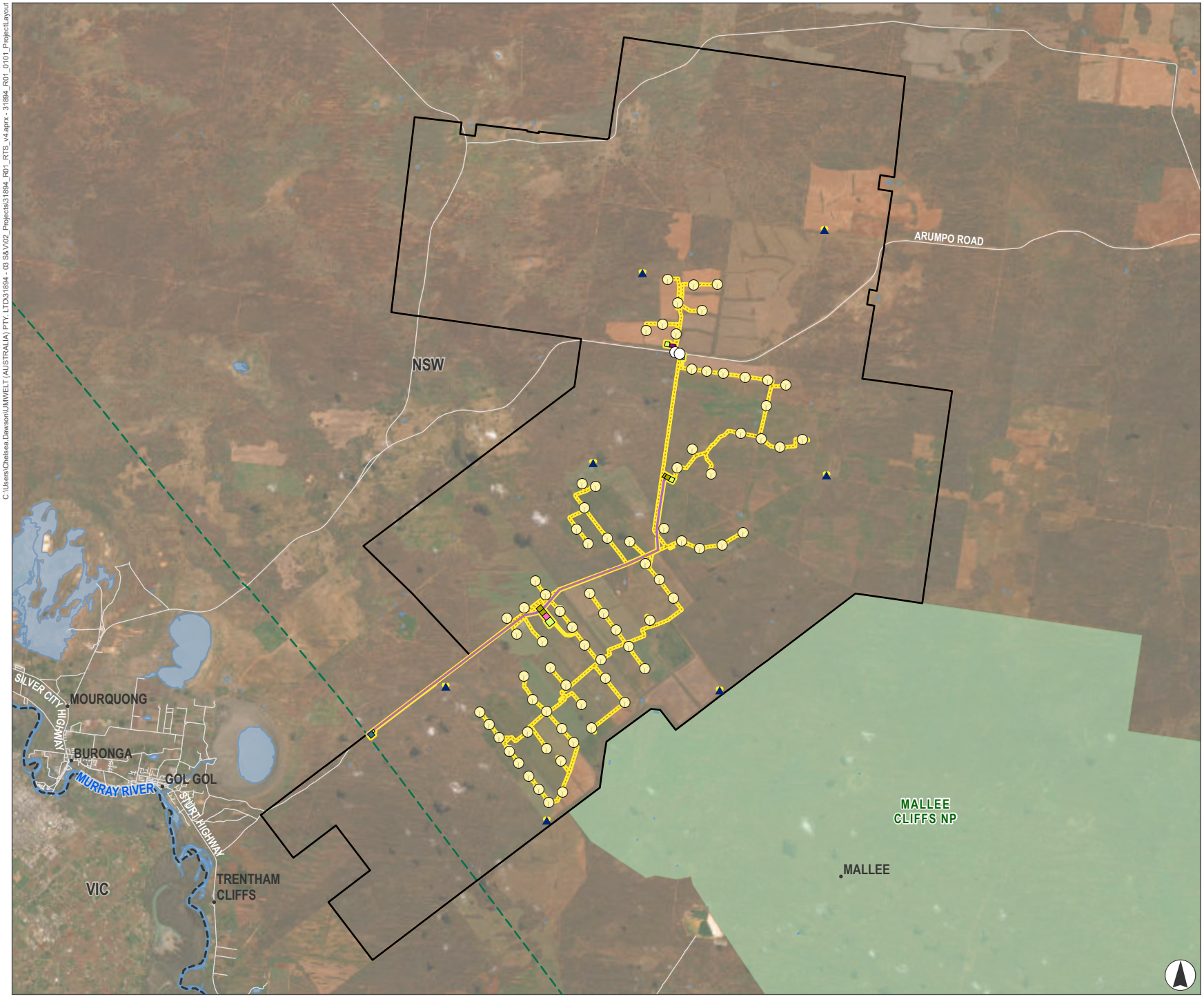
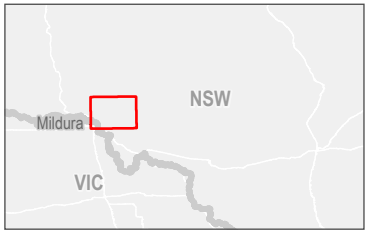


FIGURE 1.1

Project Layout

Legend

- Project Boundary
- Disturbance Footprint
- Access Points
- Wind Turbine Generators
- Permanent Meteorological Masts
- Access Tracks
- HV Transmission Line
- Collector Substation and Switchyard
- Operations and Maintenance Facility
- Construction Compound
- TWA Facility
- Switchyard
- Battery Energy Storage System (BESS)
- Road
- Existing HV Transmission Lines
- Watercourse
- Waterbody
- NPWS Reserve
- State Border



0 5 10

Kilometres

Scale 1:220,000 at A4
GDA2020 MGA Zone 54

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Image Source: ESRI Basemap (2025) | **Data Source:** NSW DFSI (2025)

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2.0 Analysis of Submissions

2.1 Breakdown of Submissions

A total of 140 submissions were made in relation to the Project. Of these:

- 20 submissions (in the form of advice) were received from State and Commonwealth Government Agencies and Wentworth Shire Council.
- 120 public submissions were received, including 119 submissions objecting to the Project and one (1) submission in support of the Project.

Further analysis of the submissions is provided in **Section 2.2** and **Section 2.3** below.

2.2 Government Agencies

2.2.1 Council

A late submission from Wentworth Shire Council was received in October 2025. The submission did not object to the Project, but provided commentary regarding aviation safety, impacts to the local road network and waste management. These matters are addressed in **Section 4.1**. Council engagement following the submission of the EIS is discussed in **Section 3.1.1**.

2.2.2 State and Commonwealth Government Agencies

A total of 19 State and Commonwealth Government Agencies provided advice on the EIS, being:

- APA
- Civil Aviation Safety Authority (CASA)
- Commonwealth Department of Defence
- NSW Fire and Rescue (FRNSW)
- Heritage NSW within the NSW Department of Climate Change, Energy, the Environment and Water (DCCEEW)
- The Regional Delivery Division (RD), South West of the Conservation Programs, Heritage, and Regulation (CPHR) (formerly South West BCD) section of NSW DCCEEW
- NSW DCCEEW – Water
- NSW DPHI[1]
- NSW DPHI – Crown Lands
- NSW Department of Primary Industries and Regional Development (DPIRD)

[1] NSW DPHI provided a request for information relating to temporary workforce accommodation, rather than a submission.

- NSW DPIRD – Fisheries
- NSW DPIRD – NSW Resources
- NSW Environment Protection Authority (EPA)
- NSW National Parks and Wildlife Service (NPWS)
- NSW Rural Fire Service (RFS)
- NSW Telco Authority
- Transport for NSW (TfNSW)
- Transgrid
- WaterNSW.

No Local, State or Commonwealth Government Agencies objected to the Project, however, further information or clarification of aspects of relevant assessment has been requested by some of these agencies whilst others had no comments.

Responses to Government Agency advice are provided in **Section 4.2**.

2.3 Public Submissions

Of the total 120 public submissions received in relation to the Project, one (1%) was in support of the Project and 119 (99%) were in objection. No public submissions provided "comment" (i.e. a submission that neither supports nor objects) in relation to the Project. It should be noted that three (3) public submissions that objected to the Project were incorrectly marked as being in "support".

A breakdown of public submissions is provided in **Table 2.1**below.

Table 2.1 Breakdown of Public Submissions

Type	Objection	Support	Comment
Stakeholder Groups	20	1	0
Individual	99	0	0
Total	**119**	**1**	**0**

2.3.1 Identification of Stakeholder Groups

Stakeholder groups and organisations who raised submissions in support of the Project included:

- Doctors for the Environment Australia

Stakeholder groups and organisations who objected to the Project included:

- Wind Away Wentworth
- Illuka Resources Limited
- National Rational Energy Network Inc.
- Save Our Surroundings Moulamein
- Gol Gol Community Reference Group Inc.

- Grand Junction Pty Ltd
- Save Our Surroundings Murrumbidgee
- Save Our Surroundings Riverina
- UHI Pty Ltd
- Rest of NSW / Defence Neighbours Association Inc
- CWO REZist Inc
- CWO Pty Ltd
- Rainforest Reserves Australia
- Wentworth Capital Pty Ltd
- Wheeldon Amigh Pty Ltd
- Secura Australia Pty Ltd
- Save Our Surroundings.

2.3.2 Counting of Public Submissions

In reviewing the public submissions, it was noted that of the total 119 objections received:

- 13 submissions were signed by a single individual, either in a personal capacity or as a representative of a company or stakeholder group. Of these, four (4) submissions were provided by a single company.
- Two (2) submissions referenced other wind farm developments and proponents, with the same submissions, and on that basis do not appear to relate to the Project.

As noted in the geographical distribution of public submissions analysis (refer **Section 2.3.3** below), these represented 13 of the 14 total "local" (0 km to 5 km from the Project) submissions and two (2) of the 90 total "broader community" (over 100 km from the Project) submissions, respectively.

Nevertheless, for the purposes of this analysis, these submissions have been identified as individual submissions that relate to the Project, and the issues raised within the submissions have been duly addressed within this Submissions Report.

2.3.3 Geographical Distribution of Public Submissions

Consistent with the requirements of the SSD Submissions Report Guidelines (DPHI, March 2024), public submissions have been categorised as follows:

- Local (submissions originating within approximately 5 km of the Project Area)
- Regional (submissions originating within approximately 5–100 km of the Project Area)
- Broader community (submissions originating more than 100 km from the Project Area)

Table 2.2 and **Figure 2.1** below provides a geographical representation of where public submissions originated. In summary, there were:

- 14 local submissions (0 km to 5 km), all of which objected to the Project

- 16 regional submissions (5 km to 100 km), all of which objected to the Project
- 90 broader community submissions (over 100 km), of which 89 objected to the Project and one (1) was in support of the Project.

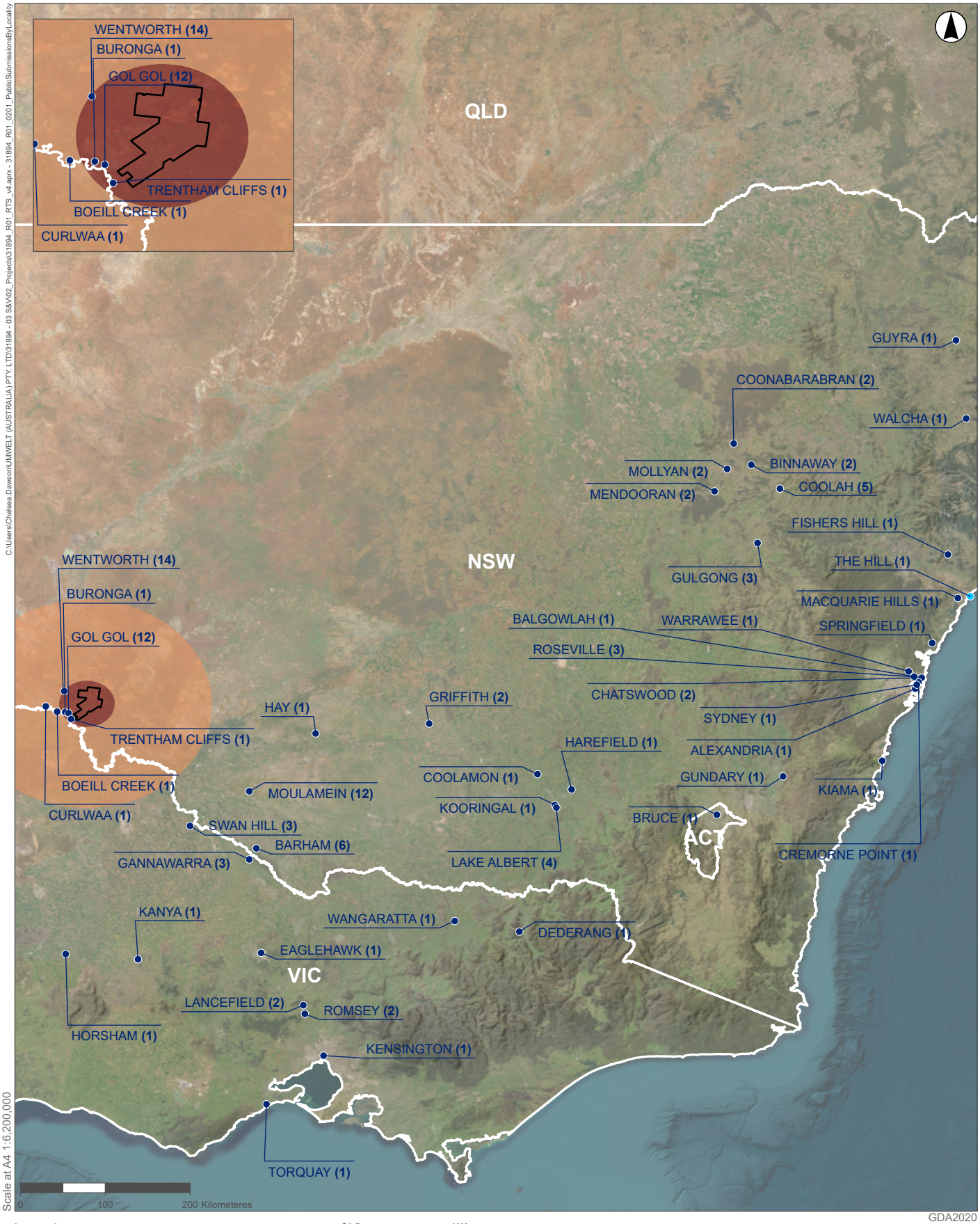
Table 2.2 Breakdown of Public Submissions by Locality

Proximity to Project	Objection	Support	Total
Local <5 km from Project	14[1]	0	14[1]
Regional 5–100 km from Project	16	0	16
Broader Community 101 km+ from Project	89[2]	1	90[2]
Total	**119**	**1**	**120**

[1] Of the 14 local submissions received, 13 appeared to be authored by a single individual.

[2] Of the 90 broader community submissions received, two (2) do not appear to relate to the Project.

It is noted that this analysis was based on the locality listed for each individual or stakeholder group making a submission. Based on the limitations of the data, this analysis is therefore an approximation only.



Legend

- Project Boundary

Community Submissions

- Object
- Support

How Submissions are Characterised

- LOCAL AREA Within approximately 5 km of the Project Area
- REGIONAL AREA Within approximately 5–100 km of the Project Area

QLD

- Brisbane City **(1)**
- Bungalow **(1)**
- Kepnock **(1)**
- Lake Barrine **(1)**
- Ravenshoe **(1)**
- Redbank Plains **(1)**
- Redcliffe **(1)**
- Springfield **(1)**

WA

- Perth **(1)**

TAS

- Somerset **(1)**

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FIGURE 2.1

Public Submissions by Locality

Image Source: ESRI Basemap (2025) | **Data Source:** NSW DFSI (2025)

2.3.4 Categorisation of Issues in Public Submissions

A total of 35 issues were raised in public submissions, as set out in **Table 2.3** below. Consistent with the requirements of the SSD Submissions Report Guidelines (DPHI, March 2024), each of the 35 issues raised in public submissions have been grouped into five (5) main categories:

- The Project (e.g. the Project Area, the physical layout and design, key uses and activities, timing).
- Procedural matters (e.g. level or quality of engagement, compliance with the SEARs, 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 the Project with Government plans, policies or guidelines).
- Issues that are beyond the scope of the Project (e.g. broader policy issues) or not relevant to the Project.

A breakdown of submissions by category of issues raised is provided in **Table 2.3** and **Graph 2.1** below.

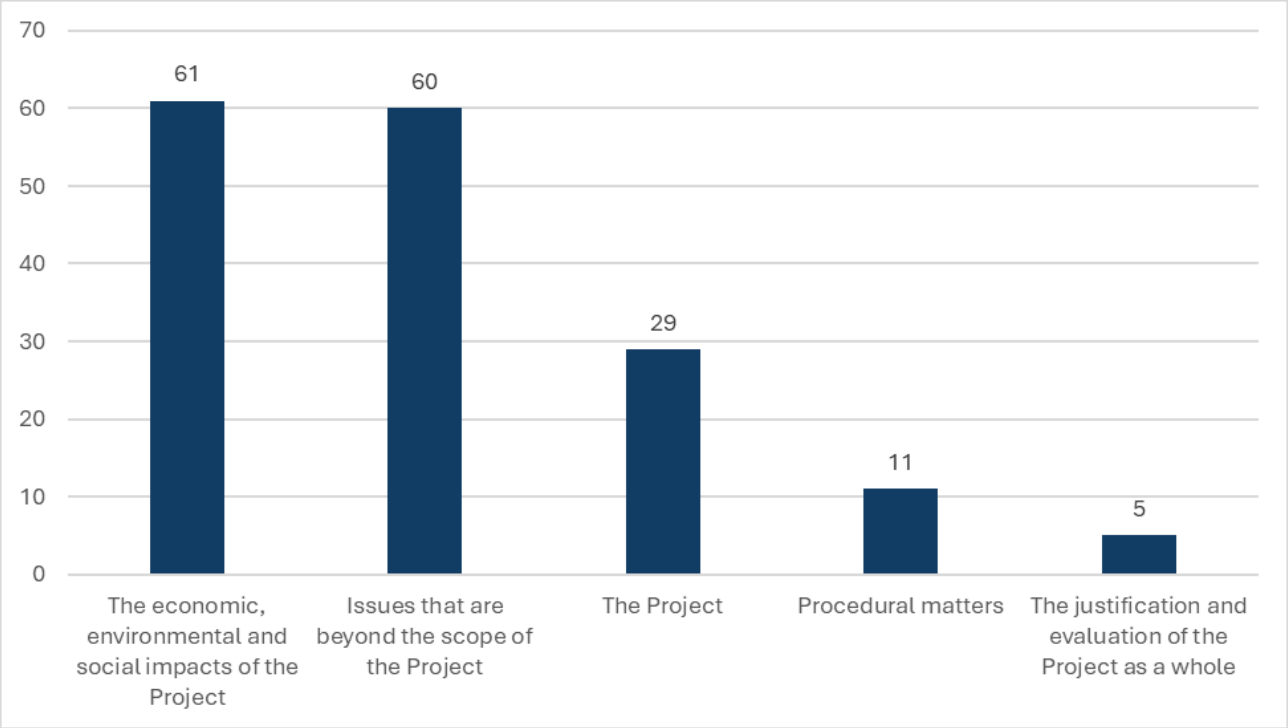
Table 2.3 Analysis of Issues Raised in Submissions

Category	Number of Issues Raised Within This Category	No. of Submissions Raising Submissions in this Category[1]	% of Public Submissions Raising Issues in this Category[1,2]
The Project	4	29	24%
Procedural matters	3	11	9%
The economic, environmental and social impacts of the Project	14	61	51%
The justification and evaluation of the Project as a whole	2	5	4%
Issues that are beyond the scope of the Project	11	60	50%
Total	**35**	**-**	**-**

[1] As a single submission may raise issues across multiple categories, the total in this column exceeds the total of 120 public submissions or 100% overall.

[2] Percentages are rounded to the nearest whole number.

As the Project is aligned with the NSW Electricity Strategy and Electricity Infrastructure Roadmap and involves the establishment of a wind farm within an area specifically identified by the NSW Government as being suitable for renewable energy development (including wind farms), issues raised in relation to renewable energy development or wind farm projects generally are considered to be broader policy issues beyond the scope of the current Project.



Graph 2.1 Number of Public Submissions Raising Issues Within Each Category

2.3.4.1 The Project

There were 29 public submissions that raised concerns relating directly to the Project, of which:

- 28 submissions commented on the unsuitability of the site for the Project, of which:
  - 19 submissions suggested the site was unsuitable due to distances to towns/dwellings
  - 13 submissions suggested the site was unsuitable due to distances to national parks
  - Three (3) submissions suggested the site was generally unsuitable.
- One (1) submission commented on the Project design.

2.3.4.2 Procedural Matters

There were 11 public submissions that commented on procedural matters relating to the Project, of which:

- Seven (7) submissions commented on the level or quality of community engagement undertaken by Spark Renewables for the Project.
- Six (6) submissions commented on the extent to which the EIS considered relevant policy and statutory requirements and the Project SEARs.
- Three (3) submissions commented on the public exhibition process.

2.3.4.3 Economic, Environmental and Social Impacts of the Project

There were 61 public submissions that raised specific concerns surrounding the environmental, social and economic impacts of the Project. These submissions were further broken down into the following categories:

- 33 submissions commented on biodiversity impacts
- 24 submissions commented on social and economic impacts
- 14 submissions commented on visual impacts
- 11 submissions commented on bushfire risks
- Ten (10) submissions commented on decommissioning and waste impacts
- Nine (9) submissions commented on water impacts
- Nine (9) submissions commented on noise impacts
- Nine (9) submissions commented on traffic impacts
- Seven (7) submissions commented on human health risks
- Six (6) submissions commented on agricultural impacts
- Four (4) submissions commented on cumulative impacts
- Two (2) submissions commented on heritage impacts
- Two (2) submissions commented on air quality and greenhouse gas
- One (1) submission commented on aviation safety.

It is noted that additional submissions raised the above issues with respect to renewable energy projects, generally. These comments were categorised as issues which are out of scope.

2.3.4.4 Justification and Evaluation of the Project

There were five (5) submissions which provided comments that offered a justification and/or evaluation of the Project, of which:

- Five (5) submissions commented on strategic planning considerations
- Two (2) submissions commented on the capacity of the South West REZ.

2.3.4.5 Issues Beyond Scope

There were 60 public submissions that raised issues which Umwelt considers to be beyond the scope of the Project. This includes:

- 25 submissions provided commentary on the reliability and/or suitability of renewable energy
- 20 submissions commented on general impacts to rural and regional communities
- 20 submissions provided political commentary
- 18 submissions commented on general impacts to biodiversity
- 14 submissions commented on general contamination risks

- 12 submissions raised scepticism on the economic benefits of renewable energy projects generally
- 11 submissions commented on general decommissioning or waste impacts
- Nine (9) submissions commented on general impacts to human health and safety
- Eight (8) submissions commented on general impacts to agricultural land
- Seven (7) submissions raised general bushfire risks
- Five (5) submissions commented on general impacts to land and water.

3.0 Actions Since Exhibition

This section provides an overview of actions taken following exhibition of the EIS. This includes:

- Project refinements including amendments to the proposed Project and updates to proposed mitigation measures (refer to **Section 3.1**).
- Targeted engagement with key agencies and stakeholders to clarify and address issues raised in submissions (refer to **Section 3.2**).
- Further technical assessment (including provision of updated and supplementary assessments) to address issues raised in submissions (refer to **Section 3.3** and the appendices to this Submissions Report).

3.1 Project Amendments

3.1.1 Summary of Project Amendments

In response to Government Agency advice received on the Project EIS during the exhibition period and to optimise the construction and operation of the Project, three (3) Project amendments are proposed.

The three (3) proposed Project amendments are detailed and comprehensively assessed within the Amendment Report (Umwelt, 2026) prepared alongside this Submissions Report and are summarised in **Table 3.1** below.

Table 3.1 Summary of Project Amendments

Project Amendment	Aspect	Summary of Amendment
1	Preferred Port	Oversize, overmass (OSOM) transport from the Port of Newcastle is no longer proposed. The Port of Portland (Victoria) has now been identified as the Project's preferred port for OSOM deliveries. Spark Renewables has identified two (2) routes for component transport which will hereafter be referred to as the OSOM Transport Route within this Submissions Report. The OSOM Transport Route extends from Port of Portland to Sturt Highway/ Carey Street, Euston, NSW. The Local Transport Route, as defined in the EIS, which extends from Sturt Highway/ Carey Street, Euston to the Project access points on Arumpo Road remains generally unchanged, with the exception of some minor adjustments associated with the proposed change to blade length (see '2' below).
2	Blade Length	The maximum proposed WTG blade length has increased from 85 m to 91 m. The EIS previously identified a maximum blade length of 85 m, based on constraints identified in the previously proposed OSOM Transport Route from Port of Newcastle. As the Project will now utilise the Port of Portland (see '1' above), these constraints no longer apply.

Project Amendment	Aspect	Summary of Amendment
3	Subdivision and boundary adjustments (Wentworth LGA)	Spark Renewables is seeking flexibility for subdivision and boundary adjustments of land within the Wentworth LGA (including nearby properties), where required to facilitate delivery of the Project and its ancillary activities through detailed design and procurement. This includes the ability to create lots that may be below the minimum lot size specified in the applicable LEP, where necessary to enable appropriate land tenure and third-party arrangements (e.g. ownership, leasing, easements, licences or transfers) for Project-related purposes.

3.1.2 Updated Mitigation Measures

In response to agency and community submissions, Spark Renewables has prepared an updated summary of proposed mitigation measures for the Project, which is presented in **Appendix C**. Key updates to these measures include:

- Expanded commitments to consult with agencies during the development of post approval management plans (refer to BF19, TT04).
- Consultation with NPWS and Australian Wildlife Conservancy (AWC) to ensure continuity of access to Mallee Cliffs National Park over the life of the Project.
- Consultation with NPWS in the event of any disruption to communication systems (EMF02).
- Further verification of WTG noise levels at the Mallee Cliffs National Park boundary (refer to NV01).
- Further flood modelling during detailed Project design (refer to WR20) and engagement with Council and NSW State Emergency Services (SES) regarding emergency planning.
- Detailed commitments to consult with relevant stakeholders and ensure that fire safety studies and emergency plans align with current guidelines and agency expectations (refer to BF01, BF16 to BF20).
- Further consultation with mining title holders regarding potential interactions with proposed mining development (RES01 and RES02).
- Commitments to obtain any necessary permits or licences in the unlikely event that the conversion of the Project Area to freehold is not completed prior to construction (CLR01).
- Avoidance of groundwater bores during construction (WR10).

3.2 Engagement

3.2.1 Agency Consultation

A summary of the Government and agency and consultation undertaken since the exhibition of the EIS is provided in **Table 3.2.**

Table 3.2 Summary of Government Agency Consultation

Agency	Format and Date(s) of Consultation	Summary of Consultation	Key Outcomes
NSW DPHI	Teleconference held 13 March 2025 Teleconference held 2 February 2026	Presentation to outline status and proposed approach to Response to Submissions	Submissions Report and Amendment Report to be provided in early 2026.
Council	• Face to face meeting held in May 2025 • Face to face meeting held in August 2025 • VPA Proposal Letter issued 28 November 2025 • Letter issued regarding planning matters on 8 December 2025 • Face to face meeting held on 17 December 2025	Regular project updates and presentation to outline status and proposed approach to Response to Submissions, with specific consideration of: • Voluntary Planning Agreement (VPA) terms • Proposed road upgrades • Water supply and waste disposal • Strategic planning and subdivisions	• Council's senior leadership acknowledged receipt of the draft VPA proposal and indicated that the proposed approach appears broadly consistent with NSW benefit sharing guidance, noting that any view remains subject to internal review and formal consideration. • Council's senior leadership noted the proposed road upgrade approach discussed to date and indicated that, based on current information, no immediate concerns were raised. Any position remains subject to further review and written confirmation. • Council's senior leadership suggested that the Project consider utilising water supply points in Buronga and noted that further engagement with Council and Western Murray Irrigation would be required through the Project's procurement to confirm commercial terms. • Council's senior leadership noted the proposed waste and wastewater approach and indicated that Council would further consider the Wentworth LGA's capacity to accept wastewater locally (including at the Buronga Sewage Treatment Plant), subject to internal assessment. • Council's senior leadership advised that current strategic planning for future housing supply is generally focused on consolidation/densification between Buronga and Wentworth, and indicated they are not aware of any current plans to extend urban densification east of Buronga towards the Project Area.

Agency	Format and Date(s) of Consultation	Summary of Consultation	Key Outcomes
CPHR	• Teleconference held 3 September 2025 • Email correspondence dated September 2025 • Email correspondence dated December 2025 to January 2026.	• Providing further detail and supporting spatial data to demonstrate the sufficiency of survey effort undertaken to date • Provide further justification for the expert reports for Painted Burrowing Frog and Desert Mouse.	• Confirmed no further surveys are required for Pink Cockatoo, Regent Parrot, Square-tailed Kite, Little Eagle, White-bellied Sea-eagle, and Black-breasted Buzzard (CPHR email dated 25 September 2025). • Confirmed expert reports are accepted in their current form (CPHR email dated 19 January 2026).
Heritage NSW	Email dated 11 March 2026	Providing project update and offering a briefing on the Updated ACHAR	Heritage NSW to review updated ACHAR once provided via DPHI
NSW DPHI - Crown Lands	Email correspondence dated October-November 2025.	• Seeking further information regarding Aboriginal Land Claim referenced in Crown Lands Submission • Seeking confirmation of status of Arumpo Road.	• Details of Aboriginal Land Claim confirmed (refer to **Section 4.2.9** for further discussion). • Confirmed Arumpo Road has been transferred to Council (NSW DPHI Crown Lands email dated 30 October 2025).
WaterNSW	Email correspondence dated October 2025	• Seeking further information from WaterNSW regarding flow gauging sites referenced in the WaterNSW submission on the EIS.	Confirmed reference to gauging sites in WaterNSW was made in error. However, impacts to groundwater monitoring sites in the vicinity of the Local Transport Route should be considered (WaterNSW email dated 7 October 2025). Consideration is provided in **Section 4.2.9**.

3.2.2 Stakeholder Consultation

A summary of the community and other stakeholder consultation undertaken since the exhibition of the EIS is provided in **Table 3.3**.

Table 3.3 Summary of Community and Other Stakeholder Consultation

Stakeholder	Format and Date(s) of Consultation	Key Outcomes
Registered Aboriginal Parties (RAPs)	Project update emails dated: • 19 January 2025 • 20 June 2025 • 23 January 2026 • 16 February 2026	• Copy of Revised Aboriginal Cultural Heritage Assessment (ACHA) provided to RAPs on 16 February 2026. • No concerns raised regarding Revised ACHA or proposed management strategies.
Local community	Mildura Field Day Pop Up Stall 16 & 17 May 2025 Wentworth Show Pop Up Stall – 30 & 31 August 2025	Engagement confirmed strong interest in local jobs, business opportunities and education outreach
Illuka Resources Limited	Emails regarding coexistence, potential project refinements and approach to managing interactions in the Submissions Report dated: • 5 December 2024 • 5 March 2025 • 12 February 2026 • 3 March 2026	Iluka advised via email on 26 February 2026 that the Euston Mineral Sands Project is currently deferred and reiterated that its submission concerns remain current. Spark Renewables has continued to offer to discuss coexistence and potential refinements to work through these issues. Spark Renewables proposes to address the matters raised through the Project's mitigation measures and conditions of consent, with coexistence requirements to be resolved through detailed design and construction planning in consultation with the relevant parties.

3.3 Further Assessment

In response to submissions, a number of specialist assessment reports that were originally presented in the EIS (Umwelt, 2024a) have been revised, or clarifications have been provided in addendum reports. Additional specialist assessments presented in this Submissions Report are summarised in **Table 3.4** below.

Table 3.4 Further Specialist Assessment – Submissions Report

Specialist Assessment	Key Revisions/Clarifications	Relevant Section/Appendix
Revised Biodiversity Development Assessment Report	Addresses CPHR submission	**Appendix D**
Updated Aboriginal Cultural Heritage Assessment Report	Addresses Heritage NSW submission	**Appendix E**

Specialist Assessment	Key Revisions/Clarifications	Relevant Section/Appendix
Updated Aviation Impact Assessment	• Addresses all relevant agency and stakeholder submissions • Reflects updated commitments, including provision of obstacle lighting	**Appendix F**
Aviation Lighting Plan	Addresses CASA and NSW DPHI requirements	**Appendix G**
Landscape and Visual Impact Assessment Addendum	Includes an obstacle lighting impact assessment	**Appendix H**
Addendum Water Resources Impact Assessment	Addresses NSW DCCEEW – Water feedback regarding discrepancies in the site water balance.	**Appendix I**

Further specialist assessment has also been provided for select matters in the Amendment Report (Umwelt, 2026), as outlined in **Table 3.5**.

Table 3.5 Further Assessment – Amendment Report

Specialist Assessment	Key Revisions/Clarifications	Relevant Section/Appendix
Revised Traffic Impact Assessment	• Addresses issues raised in TfNSW's submission • Reflects proposed changes to blade length and transport from the Port of Portland.	Appendix B

4.0 Response to Government Submissions

This section outlines and addresses key issues raised in Government Agency submissions. Details regarding agency consultation undertaken in support of this Submissions Report are provided in **Section 3.2.1**.

4.1 Wentworth Shire Council

Council did not object to the Project, but provided comments regarding aviation safety, impacts to the local road network and waste management. Council comments, along with Spark Renewables' responses, are extracted below.

4.1.1 Aviation Safety

> *The height of the structures is likely going to impact the operation of the Wentworth aerodrome. The aerodrome has recently been upgraded and is used as a hub during emergencies by emergency services i.e. floods, bushfires. Its optimal operation must be protected with steps put in place which may include a Voluntary Planning Agreement (VPA).*

An Aviation Impact Assessment (AIA) was undertaken for the Project and was presented in Appendix 20 of the EIS. Impacts to Wentworth Aerodrome were considered in Section 6.4 of the AIA, which concludes that as the Project is located further than 3000 m from the Aerodrome, the Project will not impact upon flight operations. Consequently, and while Spark Renewables is committed to entering into a VPA in respect of the Project, no specific provisions in this agreement are required with respect to the Wentworth Aerodrome.

4.1.2 Impacts to Local Road Network

> *The transportation of the wind turbines to the site will likely impact the local road network. As part of the detailed Traffic Management Plan design, consultation with Wentworth Shire Council must be conducted. Any road upgrades or works required because of the development must be discussed with Council with all related costs borne by the developer.*

Spark Renewables is committed to ongoing consultation with Council to manage impacts to the local road network. Consultation undertaken during the preparation of the Submissions Report is discussed in **Section 3.2.1**. This commitment will continue into the preparation of Traffic Management Plans for the Project, as reflected in the updated mitigation measures for the Project (refer to TT04 in **Appendix C**).

It is also acknowledged that any costs associated with proposed road upgrades (as detailed in the Project description) will be the responsibility of Spark Renewables.

4.1.3 Waste Management

The disposal of the waste during construction, operation and decommissioning of the development is a matter of importance to Council especially waste to be disposed of within the Council borders e.g. disposal of wind turbines. Council should be consulted during drafting of the Waste Management Plan.

Spark Renewables will consult with Wentworth Shire Council during the development of the Waste Management Plan. This is reflected in updated mitigation measures for the Project (refer to W01 in **Appendix C**).

4.2 State and Commonwealth Government Agencies

4.2.1 APA

APA advised that as the Project is located approximately 15 km from APA's nearest asset, APA has no concerns with the Project at this time. Spark Renewables acknowledges this submission and confirms no further comment or assessment is required in this Submissions Report.

4.2.2 CASA

CASA provided detailed comments regarding aviation safety. CASA comments, along with Spark Renewables' responses, are extracted below.

4.2.2.1 Obstacle Lighting

CASA agrees with the Recommendations at Section 11 of the Aviation Impact Assessment. However, CASA considers the proposed wind farm will be a hazard to aviation safety and recommends that the wind farm is obstacle lit with steady medium-low intensity red obstacle lighting in accordance with the National Airports Safeguarding Framework Guideline D 'Managing the Risk of Wind Turbine Farms as Physical Obstacles to Air Navigation' National Airports Safeguarding Framework Principles and Guidelines (infrastructure.gov.au) and section 9.31 of Part 139 Aerodromes Manual of Standards Part 139 (Aerodromes) Manual of Standards 2019 (legislation.gov.au) (lower level lights on the turbine support columns are not essential).

International standards require 2,000 candela lighting intensity on the nacelle (also recommended in the NASF guideline) and 200 candela at the mid-point of the turbine mast. CASA recommends that 200 candela as a minimum intensity lighting on the nacelle would suffice (due mainly to the lack of background lighting in the vicinity of the turbines). The obstacle lighting should be monitored to alert the wind farm operator of any outage and some of the obstacle lights remain on during an outage. CASA is prepared to review a lighting plan that indicates which turbines are proposed to be lit.

Spark Renewables has committed to provide obstacle lighting, consistent with CASA requirements. An Aviation Lighting Plan is provided in **Appendix G**.

> *As the Aviation Safety regulator, CASA does not consider the visual impact of obstacle lighting on neighbours / homesteads / the dark sky. However, there are mitigations for visual impact such as baffling and intensity control (as described in the Aviation Impact Assessment Table 10 / Page 49 'Effect of obstacle lighting on neighbours' and page 7 of Annexure 3 'Regulatory Requirements – Lighting and Marking').*

An assessment of visual impacts associated with obstacle lighting is provided in **Appendix H**. Spark Renewables has committed to consider shielding of obstacle lighting to minimise lighting impacts to nearby properties if required. These commitments are reflected in **Appendix C**.

> *Further to Recommendation 5, and as recommended by the Aerial Application Association of Australia, CASA recommends that the following Australian Standard be considered regarding overhead transmission lines: AS 3891.2, Air navigation — Cables and their supporting structures — Marking and safety requirements, Part 2: Low-level aviation operations.*

Spark Renewables has committed to consider AS 3891.2 during detailed design (refer to **Appendix C**).

> *The impact on MSAs and LSALTs is covered in Aviation Impact Assessment Section 6 and Section 10 but not specifically included in Section 11 Recommendations. The proponent (or the proponent's Aviation Consultant) should engage with Airservices Australia regarding the changes to MSAs and LSALTs, before the infringing WTGs have been erected. (Airservices may need some lead time). As described by Aviation Projects on page 22 of the AIA, the Mildura Airport operator will also need to approve the changes.*

Consultation with Airservices Australia, and the operators of both Mildura Airport and Wentworth Airport is underway and remains ongoing. Further details regarding consultation is provided in **Appendix F**.

4.2.3 Department of Defence

The Department of Defence advised that it has no objections to the Project, provided that Spark Renewables complies with Airservices Australia's procedural requirements for the reporting of tall structures, including the completion and submission of a Vertical Obstacle Notification Form. These requirements are reflected in **Appendix C** (refer to AV02 and AV03).

4.2.4 FRNSW

FRNSW advised that due to the inclusion of a BESS, additional fire fighting provisions are likely to be required for the Project in accordance with E1D17 and E2D21 of the National Construction Code 2022. Specific FRNSW recommendations for the Project are extracted below, along with Spark Renewables' responses.

4.2.4.1 Fire Safety Study

Prior to construction a Fire Safety Study (FSS) is developed in accordance with the requirements of the Hazardous Industry Planning Advisory Paper (HIPAP) No.2 and submitted to FRNSW for review. The FSS is to be used to inform the design and as such it is FRNSW Position and that the FSS be developed to the satisfaction of FRNSW prior to any further submission being made to FRNSW; this includes: an Initial Fire Safety Report (IFSR) and / or Performance-Based Design Brief / Fire Engineering Brief Questionnaire (FEBQ). The FSS should be prepared consistent with the FRNSW Fire Safety Guideline Technical Information – Large scale external lithium-ion battery energy storage systems – Fire safety study considerations.

Spark Renewables has committed to the preparation of an FSS post-determination (and prior to the construction of the BESS) in line with FRNSW recommendations. This is reflected in **Appendix C** (refer to BF16).

4.2.4.2 Emergency Plan

Prior to occupation or commissioning an Emergency Plan (EP) is developed for the site in accordance with HIPAP No.1.

Spark Renewables has previously committed to prepare and implement a Bush Fire and Emergency Management Operations Plan (BFEMOP) for the Project post-determination (and prior to the commencement of construction). This commitment has now been updated to ensure adherence to HIPAP No. 1 (refer to BF01 in **Appendix C**).

4.2.4.3 Emergency Services Information Package

Prior to occupation or commissioning an Emergency Services Information Package (ESIP) is developed for the site in accordance with FRNSW fire safety guideline – Emergency services information package and tactical fire plans.

Spark Renewables has committed to develop an ESIP for the Project, in line with FRNSW recommendations. This is reflected in a new mitigation measure (refer to BF17 in **Appendix C**).

4.2.4.4 Emergency Responder's Induction Package

Prior to occupation or commissioning an emergency responder's induction package is developed for the site in consultation with, and to the satisfaction of FRNSW. The package should inform first responders of site-specific features and safety measures to ensure they are able to undertake their duties effectively. The format of the induction package should be such that it can be readily shared across all agencies.

Spark Renewables has committed to develop an emergency responder's induction package for the Project, in line with FRNSW recommendations. This is reflected in a new mitigation measure (refer to BF18 in **Appendix C**).

4.2.4.5 Engagement with FRNSW

Project proponents undertaking the FSS are to engage directly with FRNSW by submitting all correspondence electronically to FireSafety@fire.nsw.gov.au and reference FRNSW file number FRN23/605. Further information regarding FRNSW Meetings and FRNSW Written Reports can be found at the FRNSW Building Fire Safety Industry Portal.

Spark Renewables acknowledges this feedback and will engage with FRNSW via the nominated email address. This is reflected in a new mitigation measure (refer to BF19 in **Appendix C**).

4.2.5 Heritage NSW

Heritage NSW provided a range of comments regarding the Aboriginal Cultural Heritage Assessment (ACHA) provided in the EIS. Key aspects raised by Heritage NSW are extracted in the sections below, along with Spark Renewables responses. Heritage NSW advice is addressed in full in Section 1.10 of the Updated ACHA (refer to **Appendix E**).

4.2.5.1 Test Excavation

As standard practice, Heritage NSW requires the identification of Potential Archaeological Deposits (PADs) and subsurface testing of those deposits to establish their archaeological significance. Please provide clarification and detail of the assessment for PADs within the project area, for the survey units, the newly identified sites and the landforms surrounding the newly identified sites. Justification as to why test excavations should not occur prior to construction in the project area should also be provided. If adequate justification is not provided, Heritage NSW recommends that test excavations occur prior to any construction impacts in the project area.

Chapter 8: Analysis and Discussion as well as relevant sections in Chapter 3: Landscape Context, Chapter 4: Archaeological Context and Chapter 5: Predictive Model of the ACHA have been updated in to provide further justification that no test excavation is required for the Project.

In summary, test excavation was not considered warranted based on the location of the proposed development, and well-established models of site distribution and Aboriginal occupation for the region; pre-contact water availability; and other environmental factors, including levels of post-contact soil erosion and long-term agricultural impacts to the landscape. It is noted that a single PAD (Mallee Windfarm PAD / 46-3-0236) was identified during survey, however this PAD has been avoided by the Project. Any test excavation of the PAD would therefore cause unnecessary harm to any potential site located within the PAD.

Regional patterns of Aboriginal site distribution in far western NSW are affected by their distance from fresh water sources or stone material sources. Landforms suited to long-term intensive use (e.g. source bordering dunes or campsites adjacent to fresh water), and levels of post-contact modification of the soil, are critical factors in determining the presence of surface and subsurface archaeology (Pardoe 2003; Witter 2004). The Project Area contains only ephemeral water sources and does not have any source bordering dunes or stone outcrops suited to tool procurement. This means that the Project Area is likely showing a distribution of sites that is representative of Aboriginal people travelling through the landscape and camping at reliable water holes. These activities leave few archaeological traces in the landscape.

Finally, within the Disturbance Footprint, the soils have been subject to extensive modification from vegetation clearing, cropping, grazing and other agricultural activities. Given that the Disturbance Footprint is not associated with permanent or semi-permanent fresh water or stone material sources, subsurface sites would only exist in low numbers with very low artefact concentrations. With the influence of post-contact land clearing, ploughing and soil erosion, it is unlikely that any subsurface artefacts are in situ. Any subsurface sites that would be in situ would likely be located in areas where sand has built up and therefore would be approximately 1.5 m below the surface (Cattle 2016). Consequently, subsurface testing is highly unlikely to provide any additional information as to the nature of the cultural heritage within the Project Area that could not be determined through the survey.

Figure 4.1 depicts the archaeological potential of the Project Area, which was developed using topographic maps, modern and historical aerials, predictive modelling, and survey results. **Figure 4.1** represents both surface and subsurface archaeological potential, with the only location for subsurface archaeology being present in a single area of high archaeological potential associated with (Mallee Windfarm PAD / 46-3-0236), which will not be impacted by the Project.

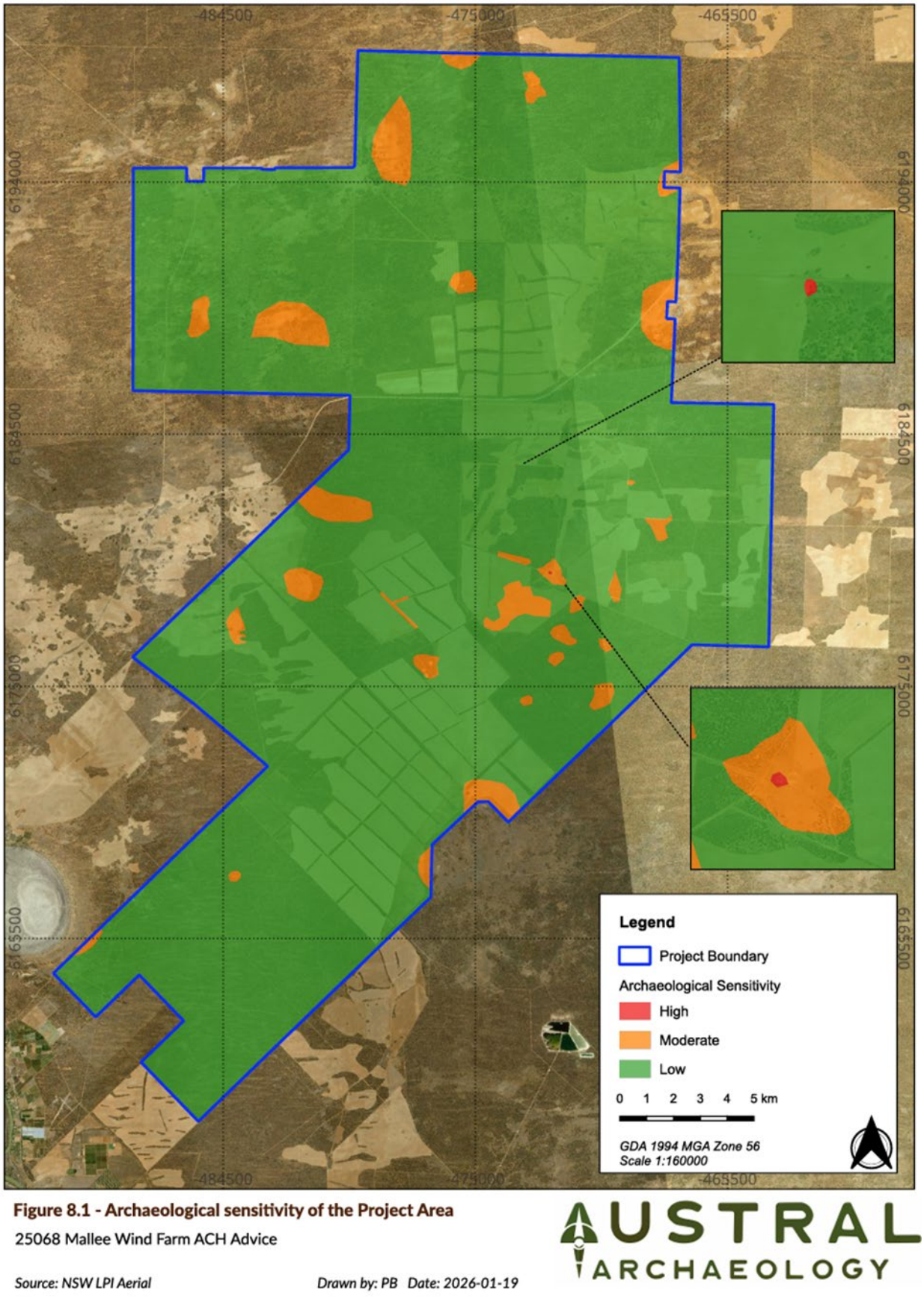


Figure 4.1 Archaeological Sensitivity of the Project Area

Source: Austral (2026)

4.2.5.2 Map Scale

The scale of many of the maps of archaeological potential, recorded sites (including PAD), survey results and proposed impacts do not allow for an understanding of the archaeological potential of the project area, the sites or their potential interactions with the disturbance footprint. Please provide a map series of the project area, including those at a scale to allow the information to be understood and allow for the identification of the AHIMS sites. Due to the projects' need for further detailed design throughout the assessment process please provide mapping including clear site and PAD boundaries, including the site distribution referred to in the survey results.

Relevant figures such as the archaeological sensitivity, survey results, and the proposed works have been updated in 10.1 to 10.8 of **Appendix E** to included multiple maps at a closer scale or contain insert maps to highlight important information.

4.2.5.3 Evidence of Stakeholder Consultation

Please provide a copy of all responses provided by the Registered Aboriginal Parties regarding the draft ACHA within the 28-day statutory response timeframe (starting 19 July 2024).

Omitted correspondence has been included in Appendix B8, in Volume 2 of the Updated ACHA (**Appendix E**).

4.2.5.4 Assessment of Social and Spiritual Significance

Please provide an updated assessment of social and spiritual significance values. Section 9.3.4 of the ACHA includes a placeholder indicating that information is to be updated at the conclusion of Stage 4 consultation.

Section 9.3.4 of the Updated ACHA (**Appendix E**) has been updated with the relevant information based on the results of the Stage 4 consultation.

4.2.5.5 Clarification of Management Strategies

Heritage NSW agrees that preparation of an Aboriginal Cultural Heritage Management Plan (ACHMP) should be developed in accordance with the recommendations in Section 12 of the ACHA prior to undertaking any works related to the proposal. However, Heritage NSW requires further articulation be made in the ACHA for each individual AHIMS site identified within the disturbance footprint regarding proposed conservation/mitigation in the event that they would be impacted by the final design. Please identify management strategies should test excavation, salvage, community collection, etc be carried out and how these may change or be otherwise impacted by the final design.

Chapter 10: Impact Assessment and Chapter 11: Avoiding and Minimising Harm of the Updated ACHA (**Appendix E**) have been updated, along with recommendations in Chapter 12, to include all sites within the Project Area, and to clearly outline which sites will be impacted and how impacted sites will be managed. This includes a comprehensive table (Table 11.3) listing all the sites, their type, their significance, how they are being impacted and their relevant mitigation strategy.

4.2.5.6 Clarification of Disturbance Footprint

Heritage NSW acknowledges that the disturbance footprint associated with the proposed Wind Farm works has formed the basis of the survey transect lines in both the June 2023 and March 2024 archaeological surveys. Please provide further clarification that the disturbance footprint is inclusive of all construction works associated with the proposed Wind Farm including all vehicle access, temporary offices, amenities, transport route upgrades and other operational facilities.

The Disturbance Footprint is inclusive of all temporary and permanent disturbance required for the carrying out of the Project. Figure 10.1 to Figure 10.4 of the ACHA (**Appendix E**) have been updated to include all construction work associated with the Project, including temporary and permanent structures.

4.2.6 NSW DCCEEW – CPHR

CPHR provided detailed comments regarding biodiversity and flood risk management. CPHR comments, along with Spark Renewables' responses, are extracted below.

4.2.6.1 Biodiversity

CPHR requested a range of clarifications regarding various aspects of the BDAR, as discussed in the sections below.

Survey effort for threatened birds and flight path mapping

5. There has been insufficient targeted survey for threatened birds

Section 5.2.5.2 and Section 5.2.5.3 of the BDAR state that targeted and opportunistic surveys were completed for raptor nests, Pink Cockatoo and Regent Parrot breeding sites respectively.

Opportunistic surveys are not consistent with Section 5.1.2 or Section 6.1.5 of the BAM which requires targeted surveys, and it is unclear in the BDAR and the spatial data, what, if any specific targeted surveys were completed. While four tree hollows have been mapped, it is not clear what specific survey has been conducted for this habitat feature throughout the site. Tree hollow searches should be an important component of targeted search effort for breeding Pink Cockatoo. Similarly, there has been no evidence provided of targeted survey effort for threatened raptor candidate species.

Section 5.2.5.2 and Section5.2.5.3 of the BDAR also state that "opportunistic searches were undertaken concurrently during all biodiversity survey effort across the Biodiversity Study Area. Where habitat features were identified, GPS locations and relevant ecological data was recorded within digital survey platforms". Based on the above, it appears that additional survey effort was only completed if habitat features were identified during these opportunistic surveys. This does not qualify as targeted surveys on their own.

While BCS note that minimal areas of native vegetation will be cleared by the development, assessing for the presence of breeding habitat for threatened species adjacent to or between turbines should be used to inform collision risks and enable identification of potential very high and high-risk turbines and subsequent appropriate monitoring and mitigation measures. Without targeted survey, it is not clear how species are using the site.

Recommendations:

5.1. Demonstrate that targeted bird surveys have been completed in accordance with the BAM and Threatened Biodiversity Profiles data collection (TBDC) for candidate bird species or complete additional surveys.

Additional information was provided to CPHR in the form of a meeting (3 September 2025) and subsequent briefing note (Umwelt 2025) to outline the survey effort and justify its adequacy. The additional information was accepted by CPHR on 24 September 2025 (refer to **Section 3.2.1**).

6. Mapping of bird and bat flight paths needs to be included to provide turbine-free corridors and areas of regular avifauna movement (BAM s7.2.1)

The mapping of flight paths for avifauna across the development site is a requirement under section 6.15 of the BAM but has not been completed in the BDAR. While Appendix B of the BDAR provides an assessment of turbine strike, Figures 8.3.0 to 8.4.5 show only the direction of flight, but no flight paths have been predicted or mapped across the project site. Given the network of native vegetation remnants on site there is likely to be potentially important corridors and flightpaths that need to be considered in the turbine layout. Especially important is a demonstration that important movement corridors have been retained between habitat features such as the Mallee Cliffs National Park, Southern Mallee Reserves and between native vegetation remnants, as required by BAM s7.2.1.

Recommendations:

6.1. Map likely flight paths for avifauna on and through the development site.

Flyway and flight path data can only be accurately collected via radar or smart cameras. Any data which maps flight paths without the use of specialist technology is not an accurate data provision, which may understate impacts and/or overstate avoidance measures. Noting the inherent uncertainty around turbine strike risk assessment, Umwelt had opted to ensure the assessment is accurate as possible and provide alternative data. Specifically, Figure 8.1 to 8.8 within Appendix B of the BDAR (Appendix 6 of the EIS) showed the distance and direction of bird observations from the observer which provides indicative bird utilisation patterns across the Project Area.

In order to provide additional information with regard to landscape scale movements of avifauna, Appendix B in the Revised BDAR (**Appendix D** of this Submissions Report) now includes figures detailing indicative landscape scale movement pathway for avifauna across the Project Area, and indicative migration pathways for migratory and nomadic fauna.

Bird and Bat Adaptive Management Plan (BBAMP)

7. To meet BAM section 8.4, a draft Bird and Bat Adaptive Management Plan (BBAMP) must be provided before the project is determined

Section 2 of Appendix B of the BDAR notes that an eighth season of bird and bat surveys was completed in August 2024 and will be incorporated into the revised BDAR during Response to Submissions (RtS). BCS expect to see the results of all bird and bat surveys used to inform the draft BBAMP. Currently, only a conceptual BBAMP has been presented that lacks the detail required by the BAM. The information in Appendix B of the BDAR should be used as the basis to develop the draft BBAMP prior to project determination.

In accordance with section 8.4 of the BAM, the BDAR must:

a) document mitigation measures proposed to manage impacts, including techniques, timing, frequency and responsibility for implementing each measure

b) identify any measures for which there is risk of failure

c) evaluate the risk and consequence of any impacts likely to remain after mitigation measures are applied

d) document any proposed adaptive management strategies, including:

i. baseline data against which monitoring will occur

ii. any seasonal changes to the resource that are relevant to the impacts being monitored

iii. monitoring methods, including frequency, timing and reporting

iv. trigger values for when adaptive management actions should be initiated

v. adaptive management actions proposed to reduce or eliminate the impact, which may include actions to retire additional biodiversity credits

vi. information that will be necessary to measure the impact over time.

vii. how the results of the adaptive management strategy will be applied to the ongoing management of the proposal to reduce the extent of indirect and/or prescribed impacts.

The proposal in Table 7.6 to only monitor half of the turbines for carcasses over two years is not sufficient to identify issues if they occur. The monitoring period needs to accurately capture species distribution across variable climatic conditions such as drought and high rainfall years. As such, BCS recommends extending the initial monitoring period to five years over a subset of all risk categories, after which an additional five years of monitoring is recommended for all turbines classified medium risk and above. However, given the uncertainty around flight paths and turbine risk ratings, it is important that all turbines are monitored for collision impacts.

Recommendations:

7.1. Prepare a draft BBAMP using the information from Appendix B of the BDAR.

Section 7.4.1 of the BDAR (Appendix 6 of the EIS) included detailed a comprehensive Bird and Bat Adaptive Management Plan (BBAMP) framework to inform the preparation of the BBAMP post determination. The framework includes details of surveys proposed (including methods and frequency) as part of operational monitoring of turbine strike on avifauna, as well as details on impact triggers and associated response procedures for both threatened and nonthreatened species, mitigation measures, and reporting requirements.

Preparing a BBAMP prior to Project approval before detailed design occurs risks unnecessary rework as key design elements have yet to be finalised. Furthermore, both NSW and Commonwealth agencies would have the opportunity to review and comment of the BBAMP as part of agency consultation prior to the BBAMP being adopted and implemented. In lieu of a complete BBAMP, Umwelt has supplemented the detail which would be included within the BBAMP in Section 7.4.1 of the Revised BDAR (**Appendix D**), as well as provided a Table of Contents for the BBAMP in Appendix B of the document.

7.2. Ensure the draft BBAMP meets the requirements of section 8.4 of the BAM.

The draft BBAMP will be prepared to meet the requirements of Section 8.4 of the BAM where appropriate and will consider the following:

- Documentation of mitigation measures proposed to manage impacts, including techniques, timing, frequency and responsibility for implementing each measure.
- Identification of any measures for which there is a risk of failure.
- Evaluation of risk and consequence of any impacts likely to remain after mitigation measures are applied.
- Documentation of any proposed adaptive management strategies, including:
    - Baseline data against which monitoring will occur
    - Any seasonal changes to the resource that are relevant to the impacts being monitored
    - Monitoring methods, including frequency, timing and reporting
    - Trigger values for when adaptive management actions should be initiated
    - Adaptive management actions proposed to reduce or eliminate the impact, which may include actions to retire additional biodiversity credits
    - Information that will be necessary to measure the impact over time
    - How the results of the adaptive management strategy will be applied to the ongoing management of the proposed to reduce the extent of indirect and/or prescribed impact.

7.3. Ensure the monitoring duration is ecologically defensible and will accurately capture species distribution across variable climatic conditions.

The feedback from CPHR recommends extending the initial carcass monitoring period from 2 to 5 years to account for species distribution across variable climatic conditions (drought, high rainfall etc), then recommends an additional five (5) years of monitoring for all turbines classified as medium risk or above.

The current BBAMP method proposes an initial carcass monitoring period of two (2) years, representing a minimum of two (2) monitoring rounds per season to capture climatic variability and species distribution. Following the initial monitoring period, there is a possibility of extending for a further three (3) years to total a five (5) year program if there is a clear discrepancy between estimated and realised frequency of bird and bat mortality.

8. Collision risk for microbats requires review

Section 8.4 of Appendix B contains the assessment of likelihood and consequence for the impact of turbine strike on threatened bat species. The evidence provided does not support the likelihood of collision rating and the consequence of this collision. Based on the BBUS data and known collision risk, the predicted risk for several species may not reflect the actual risk. For example: Yellow-bellied Sheath-tailed Bat and Inland Forest Bat are rated as 'moderate risk'. Yellow-bellied Sheath-tailed Bat and Inland Forest Bat are species known to fly within the Rotor Swept Area (RSA) height and collisions have been reported several times at wind farms already in operation in NSW. This would suggest that a risk rating of 'high' may be more appropriate.

Recommendations:

8.1. Review the collision risk assessment for microbat species and revise the collision risk rating where appropriate.

Umwelt has reviewed and where necessary updated the collision risk for microbats in Appendix B of the Revised BDAR (**Appendix D**).

Expert reports

9. The expert report for Desert Mouse and Painted Burrowing Frog lacks the required analysis and justification from the approved expert.

The expert report for Painted Burrowing Frog and Desert Mouse has not been prepared by the approved expert in accordance with Box 3 of the BAM. The outcomes in the expert report for these species relies almost solely on the desktop review and field investigations completed by a third party who is not listed as the approved expert for these species.

The justifications for the outcomes of the expert report must be supported by evidence including a site visit completed by the approved expert. The expert report makes no assessment of the associated PCTs and vegetation zones for each candidate species within the subject land and the potential for these associated PCTs to support these species. The expert report should reference the associated PCTs for each species and how the condition of these PCTs and associated microhabitats in the subject land may or may not support the species and why.

Recommendations:

9.1. Update the expert report for Painted Burrowing Frog and Desert Mouse to include additional justification for species absence from the approved expert based on local site conditions and the approved expert's assessment of the subject land and associated PCTs. Where additional justification from the expert cannot be provided, species assumed presence may have to be considered.

On 19 December 2025, Umwelt sought confirmation from CPHR via email on the approach regarding the expert report presented in Appendix H of the BDAR. This is on the basis that:

- The existing expert report for the Painted Burrowing Frog and Desert Mouse meets all BAM Section 5.3 requirements, and no further justification for species absence is needed.
- The expert is the only approved expert for these species, and his methodology and recommendations carry significant weight.
- Surveys and data review were undertaken by a third-party consultant nominated by the approved expert for their specialist experience and local knowledge, and fully aligned with BAM requirements.

Umwelt also provided extensive supporting BDAR data. On 19 January 2026, CPHR confirmed that the expert reports will be accepted as they are and therefore no revisions to the expert reports are required and that the species are not to be assumed present (refer to **Section 3.2.1**).

Identification and assessment of some direct, indirect and prescribed impacts

10. Confirm if all asset protection measures are included in the assessed development footprint.

Section 1.2.2 of the BDAR does not specify if the development footprint includes the location of asset protection features, such as:

- *All permanent fencing, including any barbed wire-topped security fencing (mentioned in EIS section 3.5.8 and section 3.5.9.2).*
- *Commitment in measure BF12 (in EIS section 6.13.2.2) to maintaining clearance of all woody vegetation within two metres of power poles, and clearance of all woody vegetation within three metres of transmission tower structures or 12 metres from the centre of the tower (whichever is greater).*

Mitigation measures include some potential impacts that have not been described or assessed. For example, measure B32 (bushfire protections) includes "ongoing vegetation management", an activity that has not been fully described, assessed for biodiversity impacts, or located. All impacts associated with ancillary infrastructure should be identified and addressed in the BDAR. While not explicitly stated in the BDAR, the consolidated development footprint provided appears to include minimum bushfire asset protection zones specified in the EIS (BF11 and Figure 6.28):

- *accommodation 25 metres*
- *operation and maintenance facilities - 20 metres*
- *turbines, substations, switchyards and BESS - 10 metres*

Recommendations:

10.1. Provide details in s1.2.2 of the BDAR about requirements and commitments to asset protection that are likely to impact native vegetation, including APZ and security fencing.

Further information relating to asset protection has been provided in Section 1.2.2 of the Revised BDAR (**Appendix D**).

10.2. Update the BDAR, BAM-C and spatial data to include any direct impacts to native vegetation that have not been addressed.

No updates are required as all direct impacts to native vegetation have been addressed, including those related to APZs and security fencing, in Section 1.2.2 of the Revised BDAR (**Appendix D**).

11. Indirect impacts need to be identified and assessed

BCS acknowledges that substantial efforts have been made to reduce the impacts on the adjacent Mallee Cliffs National Park, most notably through the implementation of a 700-800 metre buffer, however potential indirect impacts may have been overlooked. Table 8.5 in the BDAR lists predators as a potential indirect impact, and mitigation measures have been included in Tables 9.1 and 9.2 to monitor feral populations, but there has been minimal discussion on the issue. Table 8.5 does not consider the impacts of turbine strike on increasing food resources for predators. Nor has it considered potential impacts of increased predators on the adjacent Southern Mallee Reserves and Mallee Cliffs National Park.

The Australian Wildlife Conservancy, in partnership with NSW NPWS have constructed a 37.2- kilometre feral predator-proof fence in Mallee Cliffs National Park, creating a 9,570-hectare enclosure to house at least 10 regionally extinct mammals. The BDAR should assess potential for indirect impacts on Mallee Cliffs National Park and potential risks to the feral predator- free area and the species within.

While Gol Gol Swamp and Lake Gol Gol have been listed as landscape features in the BDAR, the indirect impacts to fauna using these waterbodies have not been discussed. This is despite the Turbine Strike Prescribed Impact Assessment at Appendix B noting that many threatened waterbirds have been recorded at these waterbodies.

Edge effects and a discussion around reduced viability of adjacent habitat is raised in Table 8.5. However, edge effects are not defined or characterised in the BDAR. Mitigation measure B38 in Table 9.1 specifies the identification of edge effects as an outcome of using exclusion zones to mitigate indirect impacts. To determine an outcome based on this mitigation measure, edge effects first need to be documented to ensure relevant indicators can be monitored and measured. Without this, it is unlikely that specific indirect impacts to adjoining vegetation and habitats due to construction and operation of the wind farm will be identified or managed.

Recommendations:

11.1. Assess the potential indirect impacts on Mallee Cliffs National Park and the feral predator-free area.

It is understood that habitat fragmentation from project disturbance can result in increased predatory movements, that may result in predator species congregating into intact environments, including National Parks. However, with consideration to the disturbed nature of the existing site, works are not expected to influence the number of predators impacting the Mallee Cliffs National Park and the feral predator-free area. This expected negligible impact is further justified by the implementation of the 800 m (increased from 300 m) site impact buffer between the southeastern WTG and the Mallee Cliffs National Park, and the existence of the 37.2 km feral predator-proof fenced area within Mallee Cliffs National Park.

11.2. Commit to ongoing pest management actions in conjunction with NPWS. Pest management actions should not be delayed until triggers are met.

Spark Renewables has committed to ongoing pest management actions in conjunction with NPWS as summarised in Table 9.1 of the Revised BDAR (**Appendix D**). To reinforce the commitment to pest management in response to CPHR's comments, Table 9.1 has been revised to include additional proactive management measures that do not rely on triggers, including the use of predictive indicators to predict pest number outbreaks before they occur and the continued use of regular control measures even during low pest periods.

These updated commitments are also reflected in **Appendix C**.

> *11.3. Assess the potential indirect impacts on Gol Gol Swamp and Lake Gol Gol and the species that rely on these waterbodies, particularly in relation to bird movement to and from the waterbodies.*

The assessment of potential indirect impacts of species that rely on Gol Gol Swamp, Lake Gol Gol and other surrounding waterbodies has been addressed in Table 3.1 and Table 8.26 of Appendix B of the Revised BDAR (**Appendix D**). The revised BDAR further addresses Recommendation 11.3 by adding Section 8.2.3 'Consideration of local waterbodies in the greater landscape' to specify the species subject to indirect risk of turbine strike during movement between waterbodies.

> *11.4. Define edge effects and outline how impacts will be measured.*

Further identification and analysis of edge effects have been incorporated into the Revised BDAR (**Appendix D**), particularly in Table 8.5 and Table 9.1 with reference to the existing fragmented nature of the site.

> *12. Revise the prescribed impact assessment of vehicle strike to include at-risk species and identify effective mitigation measures*
>
> *The prescribed impact assessment indicating that no threatened entities are likely to be affected by vehicle strikes as vehicle movements will be at low speed is not justified in the BDAR. The threatened species at risk of vehicle strike are not identified and there are no associated locations where this impact is most likely or where the measures will be implemented. BCS considers that numerous species are at risk of vehicle strike, including but not limited to: Malleefowl, Pink Cockatoo, Regent Parrot, and Western Blue-tongue Lizard.*
>
> *There is no commitment in the mitigation measures to implement a speed limit, only a commitment to consider a 40 km/h speed limit on newly formed access tracks.*
>
> *Even with a commitment to limit speeds to 40 km/h on new access tracks (measure B22 in Table 9.1), the predicted additional 200–400 daily one-way vehicle movements expected over a 10-month construction period suggests that threatened entities are at risk of vehicle collision. Also, potential impacts associated with the Over Sized Over Mass movements (up to 3,122 vehicles to site) have not been considered.*
>
> *Recommendations:*
>
> *12.1. Revise the prescribed impact assessment for vehicle strike to consider all vehicle movements associated with the development.*

The Revised BDAR (**Appendix D**), specifically Table 6.1 and 7.5, have been updated to further elaborate on the risk of vehicle strike, including over-size, over-mass (OSOM) vehicles across the Project Area and identified threatened species suspectable to strike.[2]

Mitigation measures

13. Update Section 9 of the BDAR to include mitigation measures that follow the SMART principles and address the identified impacts

BAM section 8.4 requires that all measures to mitigate and manage impacts are documented in detail in the BDAR. All mitigation measures should follow the SMART principles (specific, measurable, achievable, relevant, and time-bound) and be detailed in the BDAR. This should not be deferred to post-approval management plans (such as the Biodiversity Management Plan or Construction Environmental Management Plan). The measures need to be detailed enough for BCS to be confident that impacts will be successfully managed.

The timing of some measures is confusing and unlikely to be auditable. Actions B01 to B03 are proposed to be completed during 'detailed design'. However, the Executive Summary (page vii) states that "impact to biodiversity has been avoided as far as practicable through detailed design and refinement of the proposed disturbance area", indicating that detailed design has been completed.

Success ratings for mitigation measures are unlikely to be meaningful without specific details. For example, the stated outcome for B22 (consider reducing speed limits to 40 km/h on new roads) is 'no wildlife vehicle strikes' but without a wildlife strike log or reporting protocol there is no way to assess if this measure has been successful. Measures B12 and B13 lack sufficient detail about species and locations to assess if weed control will be successful.

The spread of weeds into adjacent native vegetation leading to reduced habitat viability has been assessed in Table 8.5 as being likely. The PCT descriptions in section 4.3 include common environmental weeds such as London rocket (Sisymbrium irio), Ward's weed (Carrichtera annua), smooth catsear (Hypochaeris glabra), medics (Medicago sp.) and wiry noon- flower (Psilocaulon granulicaule). This impact is proposed to be mitigated in Table 9.1 through weed control but there is no measure for managing environmental weeds - measures B12 and B13 state that priority weeds (typically meaning those listed on the Biosecurity Act 2015) will be controlled.

BCS also question the likelihood of success of weed control measures, listed as 'effective' for B12 and B13. The likelihood of success of control measures will not be the same for all weed species, and typical weed control measures targeting priority or agricultural weeds may not address loss of adjacent vegetation condition due to non-agricultural (environmental) weeds. It does not appear that any priority weeds were recorded on the site.

Recommendations:

13.1. Clarify the timing of mitigation measures to be completed during detailed design. Provide an auditable list of all actions that have been, or will be, completed during detailed design and how the proponent will demonstrate that the outcomes have been achieved.

[2] Note commitments regarding reduced speed limits have been updated. Refer to B24 in **Appendix C**.

The Revised BDAR (**Appendix D**) has been updated to correctly reference the extent of design that has occurred to inform the original BDAR and this BDAR; noting that detailed design of the Project is yet to occur. The wording within Table 9.1 has been reviewed and updated to incorporate SMART goals where applicable.

> *13.2. Specify the target weeds to be controlled, locations and outcomes, addressing all impacts relating to weeds.*

Spark Renewables has committed to preparing a Biodiversity Management Plan (BMP) prior to construction of the Project (B04 within **Appendix C**). The BMP will specify target weeds, suitable control measures, and key performance indicators. Additional detail with regard to specific weeds which are likely to be included as part of weed control measures within a BMP has been provided B13 within **Appendix C**.

> *14. Inclusion of measures to avoid, minimise or mitigate impacts in Table 9.1 of the BDAR*
>
> *Some measures proposed in the BDAR to avoid, minimise or mitigate impacts have not been included as commitments in Table 9.1.*
>
> *For example, as described in issue 12, Table 7.5 describes design refinements to avoid or minimise the prescribed impact of vehicle strike, including limiting speed of vehicles within the project area to 80 km/hr and avoiding or minimising driving at dawn and dusk and during high rainfall periods. Table 9.1 includes measure B22 as "consider 40 km/h speed limits on newly formed access tracks to reduce the risk of fauna specifically surrounding permanent water bodies and close to farm dams, particularly after periods of rain."*
>
> *The BDAR should be reviewed to ensure that all proposed actions for mitigating biodiversity impacts are provided in Table 9.1. Terms such as "consider" and "where possible" should be replaced with language that demonstrates a commitment to implementing actions.*
>
> *Recommendations:*
>
> *14.1. Review the BDAR and appendices to ensure all proposed measures are detailed in Table 9.1.*

Impact assessment for vehicle strike has been revised in Table 9.1 of the Revised BDAR (**Appendix D**) and now considers all vehicle movements associated with the development. Mitigation measures relating to the BBAMP, such as Carrion removal, raptor perch management and lighting design, are outlined in Table 7.6 of the Revised BDAR, and are not repeated in Table 9.1.

> *14.2. Demonstrate the proponent's commitment to these measures by using binding language.*

Mitigation measures have been reviewed in accordance with CPHR comments and have been altered using binding language to demonstrate the proponent's commitment to mitigation measures (**Appendix C**). It is noted that 'where possible' in B10 refers to vegetation within the Development Footprint thus its use is appropriate within this context.

> *15. Measures proposed for offsetting the impact of turbine strike must be additional to existing commitments*
>
> *Section 10.1.4 proposes conservation actions to offset the prescribed impact of turbine strike if detected during operation. BCS do not consider actions such as "funding the implementation and monitoring of operational mitigation measures (such as curtailment) to assess the interaction with birds and bats" or "funding of testing technological*

advancements, such as IdentiFlight, Robin Radar or similar technology" as an appropriate offset mechanism. Implementation and monitoring of operational mitigation measures is the responsibility of the proponent as part of the BAM and not an offset.

Recommendations:

15.1. Remove the funding of operational mitigation and monitoring measures as a possible conservation measure to offset the impact of turbine strike.

Section 10.1.4.1 of the Revised BDAR (**Appendix D**) provides seven (7) conservation measures (including a proposed approach for implementation) which could be adopted to offset the predicted prescribed impacts that are associated with the Project in accordance with clause 6.5 of the Biodiversity Conservation Regulation 2017 (BC Regulation 2017), and as detailed within Section 4.5.11 of the Biodiversity Assessment Method 2020 Operational Manual – Stage 2.

Umwelt acknowledges that the sixth and seventh proposed conservation measure – "Funding the implementation and monitoring of operational mitigation measures (such as curtailment) to assess the interaction with birds and bats" and "Funding of testing technological advancements, such as IdentiFlight, Robin Radar or similar technology" could be misinterpreted as funding of the mitigation measure itself, rather than the intended funding to research of effectiveness.

To provide clarity, the seventh and sixth dot point within Section 10.1.4.1 has been reworded to the following: "Funding of a research project to investigate the long-term effectiveness of operational mitigation measures (such as curtailment) on impacts to bird and/or bat species" and "Funding research to investigate technological advancements, such as IdentiFlight, Robin Radar or similar technology".

Matters of National Environmental Significance (MNES)

16. The significant impact assessment for Pink Cockatoo may be underestimated and requires revision after further targeted surveys are completed.

Table 3.6 of Appendix C of the BDAR concludes that there would be no significant impact on Pink Cockatoo and Table 3.5 (item vi) states that no species credit offset is required for impacts to Pink Cockatoo because "the proposed action is not expected to disrupt the breeding cycle of the pink cockatoo". The conclusions are based on neither suitable breeding habitat nor the species being detected "during the extensive surveys in the breeding season", which are described in Table 3.5 (item ii). As identified in Issue 5, the BDAR does not demonstrate adequate targeted survey for Pink Cockatoo so the MNES assessment may need to be revised with further Pink Cockatoo surveys and assessment.

Recommendations:

16.1. Revise the significant impact assessment after further assessment of Pink Cockatoo (as detailed in Issue 5).

Additional information was provided to CPHR in the form of a meeting (3 September 2025) and subsequent briefing note (Umwelt 2025) to outline the survey effort and justify its adequacy. The additional information was accepted by CPHR on 24 September 2025. Consequently, no changes to the significant impact assessment are required.

4.2.6.2 Flood Risk Management

CPHR states that the EIS addresses the SEARs for flood risk management, contingent on Spark Renewables addressing the issues listed below prior to construction.[3]

Hydrologic Analysis and Consistency with Australian Rainfall and Runoff (AR&R)

CPHR stated that the WRIA lacks sufficient detail on the initial loss (IL) and continuing loss (CL) values adopted from the hydrologic analysis. CPHR commented that the AR&R data hub does not provide loss values for the arid zone and the Probability Neutral Burst Initial Loss values presented in Table 5.4 of the WRIA do not appear to be consistent with the values available through the A&R data hub. On this basis, CPHR made the following recommendation:

> *Provide additional detail on the loss values adopted from the hydrologic analysis. The additional detail must describe how the loss values adopted are consistent with AR&R.*

Spark Renewables has committed to undertake further flood assessment post-determination, during detailed design. This will include provision of additional detail regarding adopted loss values to CPHR. This is reflected in the updated mitigation measures in **Appendix C** (refer to WR20).

Mapping of Hydraulic (Flood Function) Categories

CPHR commented that mapping of hydraulic (flood function) categories and demonstration of the Project's compatibility with the hydraulic functions of flow conveyance in floodways and storage is required. CPHR made the following recommendation:

> *Define and map the flood function categories for both the existing and proposed condition scenarios.*

Spark Renewables has committed to undertake further flood assessment post-determination, during detailed design. This will include mapping of flood function categories for both the existing and proposed condition scenarios. This is reflected in the updated mitigation measures in **Appendix C** (refer to WR20).

Inclusion of Project Infrastructure in Hydraulic Model

CPHR commented that while the WRIA provides an overview of flood behaviour under existing conditions, it does not model the effect of the proposed Project infrastructure on flood behaviour. CPHR stated that hydraulic modelling incorporating the detailed design of the Project infrastructure, including all aspects of the development is required to demonstrate the impact of the Project on flood behaviour. In addition, CPHR stated, the large model grid size used should be reviewed to ensure that the resolution is appropriate to accurately determine the impacts.

[3] CPHR has confirmed to DPHI that all flooding related recommendations contained in CPHR's advice can be addressed post-determination, per email correspondence dated 12 March 2025.

CPHR made the following recommendation:

> *Conduct hydraulic modelling that includes the detailed design of the proposed project infrastructure to ensure the impact of the project on flood behaviour and the flood risks to on-site infrastructure and existing off-site infrastructure are adequately addressed.*

Spark Renewables has committed to undertake further flood assessment post-determination, during detailed design. This will include post-development (Project case) modelling incorporating Project infrastructure. This is reflected in the updated mitigation measures in **Appendix C** (refer to WR20).

4.2.6.3 Emergency Management and Consultation

CHPR commented that Spark Renewables should consult with Wentworth Shire Council and NSW State Emergency Services (SES) regarding emergency management. CPHR further advised that the other flood-related recommendations outlined in their advice should be addressed before active engagement commences. CPHR made the following recommendation:

> *Actively engage with Wentworth Shire Council and the NSW SES to demonstrate that emergency management matters have been discussed and supported. This should inform the development of a site-specific flood emergency response plan.*

Spark Renewables has committed to undertake consultation with Council and NSW SES regarding emergency management, during detailed design. This consultation will inform the development of the site's BFEMOP. This is reflected in the updated mitigation measures in **Appendix C** (refer to WR21).

4.2.7 NSW DCCEEW – Water

DCCEEW – Water feedback is extracted below, along with Spark Renewables' responses.

4.2.7.1 Confirmation of Water Demands

DCCEEW – Water requested confirmation of the volume of water required to meet the maximum annual site water demands during construction and operation.

> *Conflicting information is provided in the assessment documentation on the volumes required to meet both construction and operational site water demands. This is noted when reviewing the Water Resources Impact Assessment (Appendix 13) which states there will be 140 ML required over the three year construction period, however, section 3.4.11 of the EIS states 219 ML will be required for the same period. Further to this breakdown of water requirements in section 3.4.11 (20 ML for general, 84 ML for dust suppression, 12 ML for concrete batching and 113 ML for the temporary workers accommodation) is equal to 229 ML which is inconsistent with 219 ML in the same section. For the operational period there is also conflicting information within the EIS and the Appendix 13 with references to demands of both 1 ML/yr and 2 ML/yr. Further confirmation of water demands is required.*

An Addendum Water Resources Impact Assessment (WRIA) is provided in **Appendix I** to clarify estimated water demand during Project construction and operation.

In summary, it is conservatively estimated that in the order of 229 megalitres (ML) of water may be required for the Project construction.[4] This comprises:

- 18 ML of potable water for drinking water for the construction workforce
- 107 ML of clean water for TWA amenities (shower, toilet, laundry and kitchen) and concrete batching
- 104 ML of non-potable water for dust suppression and general operations (e.g. vehicle washdown).

However, these are precautionary (90th percentile) estimates. A more likely (50th percentile) estimate, which accounts for rainfall offset, on-site reuse, and the recirculation of treated effluent, indicates that the total construction water demand may be in the order of 140 ML.

Similarly, it is conservatively estimated that operational water usage (90th percentile) may be up to 2 ML per year. A more likely (50th percentile) estimate indicates that the operational water demand may be less than 1 ML per year.

4.2.7.2 Security of Water Supply

DCCEEW – Water also requested that Spark Renewables demonstrate a secure water supply is available to meet the Project's water demands.

> *Insufficient information is provided to confirm there is an adequate and secure water supply available for the project. The proponent notes they are consulting with Wentworth Shire Council but do not provide an indication if Council is willing and able to provide this water. The proponent also mentions water collected under harvestable rights as a potential supply, however it has not been identified whether this water is available for use from existing landholders. It also needs to be recognised that harvestable rights is based on landholdings rather than project area. Should the proponent wish to use harvestable rights as an option to meet site water demands further assessment including volumes per landholding and available based on existing demands and climatic factors is required. It is also noted that water taken under harvestable rights must be used within that landholding on which it is collected, which may limit the use area in the overall project.*

Water supply for the Project will primarily be sourced from Council water supplies in Wentworth and Buronga as follows:

- Potable water would be primarily sourced from Modica Crescent, Buronga and supplied via filling through a metered hydrant from the existing water main. An alternative potable water source is also proposed via Beverley Street, Wentworth and would be supplied via an overhead fill point.

[4] The reference to 219 ML in the EIS (Umwelt, 2024) was a typographical error. The total estimated water usage during construction (comprising potable, clean and non-potable water) is 229 ML.

- Non-potable water would be sourced via River Drive, Buronga and would also be supplied via an overhead fill point.

Spark Renewables has consulted with Council regarding a future commercial agreement for sourcing of water from the Council's mains water supply. Council has indicated that there is likely to be sufficient capacity available at the proposed water supply points and have no concerns subject to a commercial agreement being reached following the appointment of the project's lead contractor/s.

Water will be conserved and re-used where possible on-site, through:

- Re-use of treated effluent on-site
- Use of water collected in sediment basins
- Installation of rainwater tanks collecting runoff from building roofs
- Where possible, water from the concrete facility and vehicle washdown would be recycled and reused as far as practical.

Other supplementary water sources may be investigated during detailed design, including:

- use from existing dams where harvestable rights apply
- existing groundwater bores under agreement with relevant landholders.

However, the Project is not expected to be reliant on these supplementary water sources, and any future investigation regarding these supplementary options would include consultation with NSW DCCEEW – Water, and an assessment to confirm compliance with the *Water Management Act 2000* (WM Act) and relevant harvestable rights orders.

4.2.7.3 Sewage Management

DCCEEW - Water requested confirmation that the relevant water utility or other wastewater treatment provider can accommodate the proposed wastewater/sludge demands without impacting existing services.

> *The proponent proposes that sludge will be transported to a nearby wastewater treatment plant however no detail is provided of which treatment plant and whether there is capacity in the system to accept the waste volumes.*

Sewage and wastewater generated by the Project will be managed primarily via onsite sewage treatment systems, with removal and offsite disposal of residual solids (e.g. septage/sludge) to a suitably licensed facility.

Wentworth Shire Council operates multiple licensed sewage treatment facilities within the LGA, including:

- the Buronga–Gol Gol Sewage Treatment Works (licensed at a scale of 0–20 ML discharged)
- the Wentworth Sewage Treatment Plant (licensed at a scale of >100–219 ML annual maximum volume of discharge)
- the Dareton Sewage Treatment Plant (licensed at a scale of >20–100 ML annual maximum volume of discharge); and the East Wentworth Sewerage Ponds (licensed at a scale of >20–100 ML discharged).

The relevant Council facility licences also contemplate receipt of pump-out waste/septage generated outside the premises for treatment/processing, supporting the proposed approach of offsite disposal of treated solids (rather than bulk liquid wastewater).

Having regard to (i) the licensed scale of the local Council facilities identified above and (ii) the Project's proposed reliance on onsite treatment with offsite disposal limited to residual solids, Spark Renewables considers the Project's requirements would not represent a significant addition to local sewage volumes and that sufficient local capacity is available to accommodate the proposed solids disposal, subject to final confirmation by Council or their service provider of acceptance criteria and commercial arrangements.

The final wastewater/sludge management arrangements (including the nominated receiving facility, handling/transport logistics, estimated solids volumes, acceptance requirements and commercial terms) will be progressed and finalised with through detailed design, together with the Project's lead delivery contractor(s).

4.2.7.4 Works Within Waterfront Lands

DCCEEW – Water recommended that Spark Renewables ensure works within waterfront land are designed and constructed in accordance with the Guidelines for Controlled Activities on Waterfront Land (DPE, 2022).

> *The Guidelines for Controlled Activities on Waterfront Land should be followed for works such as watercourse crossings and placement of turbines setback from watercourses to maintain flow paths and aid in maintaining geomorphic stability.*

Spark Renewables has committed to design and construct cable crossings and all internal access tracks crossing waterways within the proposed disturbance footprint generally in accordance with these guidelines (refer to WR05 in **Appendix C**).

4.2.8 NSW DPHI

DPHI requested additional information relating to obstacle lighting and temporary workers accommodation.

4.2.8.1 Aviation Lighting

In relation to obstacle lighting, DPHI requested an Aviation Lighting Plan (ALP) for the Project as per the recommendations made by the CASA in their advice dated 11 November 2024.

The AIA presented Appendix 20 of the EIS concluded that the proposed WTGs would not require obstacle lighting to maintain an acceptable level of safety to aircraft. Notwithstanding this, Spark Renewables accepts CASA's recommendation to implement obstacle lighting for WTGs and WMTs and an ALP has been duly provided in **Appendix G**. Specific DPHI considerations for the ALP are outlined and addressed in **Table 4.1** below.

Table 4.1 Consideration of Aviation Lighting

DPHI Requirement	Consideration
Consider measures to minimise the amenity impacts of lighting	An assessment of amenity impacts associated with obstacle lighting is provided in **Appendix H**. This assessment has concluded that: • The Project is located in a relatively isolated location with minimal opportunities to view obstacle lighting. Additionally, aviation obstacle lighting is designed to focus their intensity toward the sky and areas visible to aircraft. • Beyond 10 km, the intensity of a 200 candela obstacle light (as proposed in **Appendix G**) would be indiscernible to the human eye. • As all non-associated residences and nearby townships would be located more than 10 km from the nearest lit WTG, no amenity impacts are anticipated. • As the Willandra Lakes World Heritage Area would be located more than 25 km from the nearest lit WTG, no amenity impacts are anticipated.
Identify the type of lighting management system proposed (e.g. permanent fixtures or motion sensor/radar detection systems) and include a detailed lighting plan	Fixed lighting is proposed. Lighting specifications are provided in **Appendix G**.
Identify measures to ensure obstacle lights always remain lit as indicated in the lighting management system in a fail-safe mode, and any disruption or outages are minimised to the extent practicable through documented contingency arrangements	Spark Renewables has included updated commitments in this regard in **Appendix C** (refer to AV11).

4.2.8.2 Temporary Workers Accommodation

Additionally, DPHI requested further information regarding proposed workers accommodation, including further supplementary assessment and consultation. These matters are addressed in detail in **Appendix J**.

4.2.9 NSW DPHI – Crown Lands

NSW DPHI – Crown Lands feedback is extracted below, along with Spark Renewables' responses.

4.2.9.1 Conversion to Freehold

The Environmental Impact Statement (EIS) notes that the three Western Lands Leases within the project area are in the process of converting to freehold. Should the land not be held in freehold title before the project is due to commence, the proponent will be required to ensure that all necessary approvals or tenures are in place before any access or works begin. This will include seeking concurrence from Western Local Land Services for the clearing of native vegetation and construction of hardstands and access roads proposed for Travelling Stock Reserve 66986 (Part: Lot 3805 DP 763156).

Spark Renewables acknowledges this advice. The conversion of the Project Area to freehold is now well progressed, with the conversion of the remaining lots anticipated to occur in Q1 2026. However, in the unlikely event that the conversion of the freehold title is not completed prior to the commencement of construction, Spark Renewables will obtain all necessary approvals and/or tenures prior to any access or works commencing. This will include seeking concurrence from Western Local Land Services for the clearing of native vegetation and construction of hardstands and access roads proposed for the Travelling Stock Reserve. This is reflected in updated mitigation measures for the Project (refer to CL01 in **Appendix C**).

The intersection of the Silver City Highway and Arumpo Road is a Crown reserve for Future Public Requirements and is not a road as legally defined by the Roads Act 1993. Part of the intersection is currently the subject of an undetermined Aboriginal Land Claim.

Spark Renewables has sought clarification from Crown Lands regarding the underdetermined Aboriginal Land Claim. Following further investigation, Spark Renewables affirms that:

- No land use change is proposed in this location, and proposed intersection upgrades works are limited heavily disturbed areas of the road reserve.
- Any interactions with the undetermined Aboriginal Land Claim will be addressed through standard Crown licensing processes.

Arumpo Road from the southeast corner of Lot 951 DP 756961 to the northeast corner of Lot 6917 DP 1000008 is Crown road. Any Crown road required for access to the development/proposal, may need to be transferred following discussions with Wentworth Shire Council as the relevant roads authority.

Following further consultation with Crown Lands, Spark Renewables understands that this section of road has now been transferred to Council. No specific action is therefore required, other than continued consultation with Council regarding impacts to the local road network.

Authority to use, traverse, access or build infrastructure on Crown land and roads is required under the Crown Land Management Act 2016 and/or the Roads Act 1993. It is recommended that the proponent contact Crown Lands as early as possible to discuss and initiate the processes required to authorise the use of and/or access to Crown land and roads.

Spark Renewables confirms that all relevant licences will be obtained as required to authorise the use of and/or access to Crown Land and roads prior to the commencement of construction. Consultation with Crown Roads is underway and remains ongoing (refer to **Section 3.2.1**).

4.2.10 NSW DPIRD

NSW DPIRD advised that it had reviewed the EIS, having regard to the potential impact of the construction, operation and decommissioning of the development on agricultural land and agricultural production within the Project Area and its vicinity. The Department considered that the following matters have been addressed in the EIS and relevant appendices:

- Design of the Project to minimise impacts on ongoing agricultural operations in consultation with landholders.
- Commitment to develop and implement a Decommissioning and Rehabilitation Plan (DRP) to ensure disturbed land will be returned to an equivalent Land and Soil Capability (LSC) class following the end of life for the Project.
- Commitment to develop a Weed and Pest Management plan and an Agricultural Biosecurity Management Plan.
- Commitment that any subdivision/s are administrative activities and will not involve any physical works and no new dwelling entitlements will be created as a result.
- Inclusion of an on-site TWA facility and consideration of exposure of occupants to agricultural operations in the siting of the TWA.

DPIRD advised that:

> *Based on its requirements for protection of agricultural values at and in the vicinity of the project footprint, the Department has reviewed proponent commitments for implementing targeted mitigation and management measures (as identified in the EIS) and considers they are appropriate for this project. The Department expects to see these commitments and measures reflected in any approvals and incorporated into the final detailed design and construction stages as well as operational and decommissioning planning.*

Spark Renewables acknowledges this submission and confirms no further comment or assessment is required in this Submissions Report. Spark Renewables has committed to implement the targeted mitigation measures (as identified in the EIS). These measures have been updated (where relevant) to address all agency and community submissions and are presented in **Appendix C**.

4.2.11 NSW DPIRD – Fisheries

DPIRD Fisheries advised that as there is no Key Fish Habitat (KFH) impacted by the Project, the Department has no comment on the proposal. Spark Renewables acknowledges this submission and confirms no further comment or assessment is required in this Submissions Report.

4.2.12 NSW DPIRD – NSW Resources

NSW DPIRD – NSW Resources feedback is extracted below, along with Spark Renewables' responses.

4.2.12.1 Interactions with Current Mining Titles

NSW Resources has reviewed the information supplies and notes that several authorities under the Mining Act 1992 overlap with the Project area; Assessment Lease (AL) 24, and Exploration Licences (EL) 9380, EL9530 and EL9604.

It is noted that the holders of these authorities have been engaged by the Proponent regarding the potential impacts of the Project on their exploration activities. Ongoing consultation with the holders of these authorities is recommended to identify and address concerns if they arise.

As discussed in Section 2.4.2 of the EIS, the Project Area is subject to three (3) exploration licences (EL) and a minerals assessment lease (AL):

- EL9604 – held by Murray Basin Critical Minerals
- EL9530, EL9380 and AL 24, all held by Iluka.

No submissions were received from Murray Basin Critical Minerals, however, a submission was received from Illuka regarding potential interactions with its lease areas, particularly in relation to AL24. Spark Renewables has engaged further with Illuka regarding its submission as described in Section 3.2.2 and has committed to further consideration of potential interactions during detailed design, in consultation with Illuka (refer to **Section 1.1** and RES01 in **Appendix C**).

4.2.12.2 Monitoring for Mining Title Changes

NSW further advises the Proponent to actively monitor the MinView map viewer at https://minview.geoscience.nsw.gov.au/ for mining title changes that may interact with this Project.

Spark Renewables commits to actively monitoring the MinView map post-determination (during detailed design) to identify any changes to mining titles that may interact with the Project. Should any relevant changes be identified, Spark Renewables commits to further consultation with the affected title holders and key Government agencies (DPHI and NSW Resources). This is reflected in **Appendix C** (refer to RES01).

4.2.13 NSW EPA

The EPA noted that based on the information provided, the Project will be subject to an Environment Protection Licence (EPL) under clause 17 of Schedule 1 of the *Protection of the Environment Operations Act 1997* (POEO Act) – electricity generation – electricity works (wind farms). Spark Renewables acknowledges the need for an EPL.

The EPA also requested further information regarding diesel generation and fuel storage, and the sourcing of quarried materials. EPA feedback is extracted below, along with Spark Renewables' responses.

4.2.13.1 Diesel Generation and Fuel Storage

The EPA noted that the Project will require the use of on-site diesel generators and stated that insufficient information was available regarding the number of generators and the volume of diesel that will be stored at the premises. The EPA therefore requested the following information:

> *the number of generators to be kept onsite and the number of run time hours (per annum) required for routine operation and maintenance.*

The majority of the Project's electricity demands during construction and operation are expected to be met by the local distribution network (where available) and on-site using solar panels/batteries, with diesel generation required only as a backup. Up to 15 diesel generators may be required during peak construction. Their usage would be limited to construction hours only, on an occasional basis (nominally 25% of the time). This equates to 780 hours per year, per generator.[5]

During operations, the need for diesel generators is expected to be further reduced (e.g. to a maximum of five (5) generators, also used on a backup basis only.

> *the volume of diesel stored onsite.*

Diesel storage on site will not exceed 24,000 litres (L) at any time during the construction, operation or decommissioning of the Project.

> *c) The volume and types of any other petroleum products to be stored onsite.*

No other petroleum products (other than diesel) are required to be stored on site.

4.2.13.2 Quarried Materials

The EIS refers to the excavation of materials to be used for constructing permanent ancillary infrastructure. The EPA recommends that DPHI requests further clarification regarding where the quarried material to be used in construction will be sourced from, specifically:

> *a) If a quarry/borrow pit is proposed on site, and if environmental impacts from it were considered in the assessment.*

No quarries/borrow pits are proposed to be established on site. However, as noted in Section 3.4.10 of the Project's EIS, material excavated from WTG foundations, roadworks and other earthworks will be reused on site where practicable. The environmental impacts (including noise and air quality impacts) of these earthworks were considered in the context of broader construction activities assessed in Appendix 10 (Noise) and 15 (Air Quality) of the EIS.

[5] Calculated at 25% of total standard construction hours (60 hours per week) over the course of a year.

If the applicant is not proposing to develop an onsite quarry/borrow pit, confirmation should be provided of the location the quarried materials will be sourced from, and demonstration that the facility is able and permitted to supply the required volumes.

The Project construction is conservatively estimated to require between 100,000 to 200,000 cubic metres (m^3) per annum of hard rock (aggregate and gravel), sand and concrete to enable construction of hardstands, WTG foundations, to support Project infrastructure including internal access roads and laydowns, and to facilitate necessary road upgrades. The actual volume of material required will be determined following detailed design and geotechnical investigations.

Spark Renewables has identified four (4) regional suppliers from which these quarried materials may be sourced. These locations are described in **Table 4.2** and are shown in **Figure 4.2** along with the proposed transport routes.

Table 4.2 Potential Quarry Locations

Quarry Name	Address	Resource	Production Capacity	Approvals
Mallee Quarries	305 Arumpo Road, Mourquong NSW 2739	Gypsum	100,000-500,000 tonnes per annum	EPA Licence 13239
Mallee Earthmoving & excavations	639 Meringur North Road, Meringur VIC 3496	Limestone (incl. limesand)	150,000-500,000 tonnes per annum	Works Approval WA007122
Arumpo Bentonite	291 Arumpo Rd, Wentworth NSW 2648	Bentonite	50,000-100,000 tonnes per annum	EPA Licence 10614
Morello Earthmoving	62 West Rd, Buronga NSW 2739	Quarry materials	50,000-100,000 tonnes per annum	EPA Licence 22030
Total	-	-	Up to 1,200,000 tonnes per annum	-

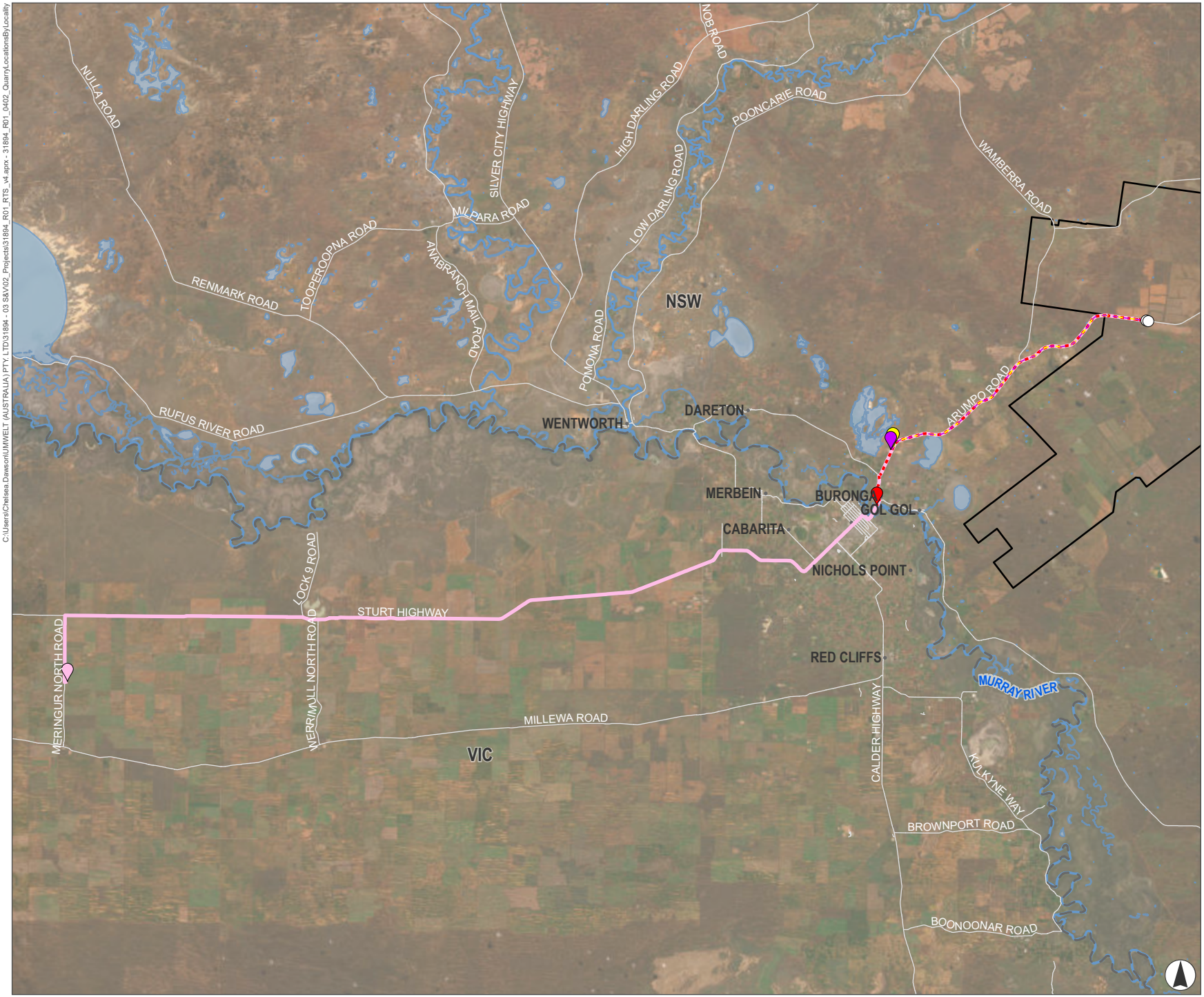


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FIGURE 4.2

Quarry Locations by Locality

Legend

- Project Boundary
- Access Points
- Road
- Watercourse
- Waterbody
- State Border

Mallee Quarries: 305 Arumpo Road, Mourquong, NSW 2739

- Quarry Location
- Transport Route

Arumpo Bentonite: 291 Arumpo Road, Buronga

- Quarry Location
- Transport Route

Morello Earthmoving: 62 West Rd, Buronga, NSW 2739

- Quarry Location
- Transport Route

Mallee Earthmoving & Excavations: 639 Meringur North Road, Meringur VIC 3496

- Quarry Location
- Transport Route

0 5 10

Kilometres

Scale 1:500,000 at A4
GDA2020 MGA Zone 54

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Image Source: ESRI Basemap (2025) | **Data Source:** NSW DFSI (2025)

Spark Renewables is actively consulting with the relevant quarry operators and has confirmed they have sufficient resources to meet the needs of the Project, across their various facilities, and with consideration of forecast demand by other renewable energy projects.

Other regional quarries within NSW and Victoria would be investigated by Spark Renewables post approval. Use of materials from other regional quarries would be contingent on:

- the quarry operator having all necessary approvals in place
- the quarry having an approved haulage route to the State Road network
- all quarry trucks utilising the Local Transport Route already identified and assessed in the Revised TTIA for the final approach between the State Road network and the Site Access Points.

Selected quarry locations will be determined during detailed design and these locations (and their respective transport routes) would be identified in the Construction Traffic Management Plan (CTMP).

Spark Renewables will continue to consult with quarry operators during detailed design, as further information becomes available regarding resource needs and Project scheduling.

On this basis, it is considered that the Project demand for quarried materials can be comfortably met by regional suppliers.

4.2.14 NSW NPWS

NPWS feedback is extracted below, along with Spark Renewables' responses.

4.2.14.1 Bushfire

NPWS noted that they have a role as a firefighting authority in responding to wildfires in the neighbouring Mallee Cliffs National Park and acknowledged that Spark Renewables is committed to develop an access protocol in consultation with key stakeholders to ensure that adequate access is provided to assist with bush fire management during the construction and operational phases of the Project. On this basis, NPWS provided the following two (2) recommendations:

> *As a condition of any project approval, require the Bush Fire Emergency Management and Operations Plan (BFEMOP) to be prepared in consultation with NPWS and to the satisfaction of both NPWS and the RFS as firefighting authorities. The BFEMOP is to include an access protocol to inform NPWS, AWC and the RFS of any temporary disruptions or change to access arrangements to Mallee Cliffs National Park through the life of the project.*

Spark Renewables has no objection to this recommendation as it relates to NPWS, though it is noted that RFS has not requested an approval role with respect to the BFEMOP, instead requesting that the plan be provided to RFS for its information. This is reflected in the updated mitigation measures in **Appendix C** (refer to BF01).

> *All Asset Protection Zones (APZ), temporary construction fencing and permanent security fencing to be contained wholly within the development site to ensure that access trails within Mallee Cliffs National Parks are maintained.*

Spark Renewables accepts this recommendation. This is reflected in the updated mitigation measures in **Appendix C** (refer to BF20).

4.2.14.2 Aviation

In relation to aviation safety, NPWS highlighted:

- There is a recorded airstrip located within Mallee Cliffs National Park approximately 23 km east[6] of the Project Area.
- Temporary aircraft landing facilities, or emergency landing can occur anywhere on NPWS estate during state of emergency operations or medical evacuations.
- NPWS facilitates regular operational use of Remotely Piloted Aircraft Systems (RPAS) / drones for surveys and monitoring, which will be an increasing used method in the area.

On this basis, NPWS provided the following two (2) recommendations:

> *Consistent with the recommendations of the Aviation Impact Assessment, NPWS request that meteorological masts are appropriately lit and marked to ensure they are visible to aircraft in accordance with NASF Guideline D. 4.*

This recommendation is reflected in updated commitments in **Appendix C**.

> *The proposal is not to restrict the use of RPAS / drones for NPWS / AWC.*

This recommendation is acknowledged in the Updated AIA (**Appendix F**). No specific risks have been identified with respect to ongoing drone usage within the Mallee Cliffs National Park.

4.2.14.3 Noise and Vibration

NPWS notes that:

> *The NVIA indicates that the maximum operational noise of the project on the Mallee Cliffs National Park boundary is 40dB (Figure 5, NVIA). NPWS is concerned that noise levels above 40dB(A) have the potential to impact on wildlife occupying Mallee Cliffs National Park.*

On this basis, NPWS recommended the following actions be undertaken as part of the Submissions Report:

> *a. Acknowledge noise levels above 40 dB(A) have the potential to impact on wildlife occupying Mallee Cliffs National Park. If exceedance occurs, impacts on biodiversity values of Mallee Cliffs National Park will need to be assessed in more detail.*

[6] The NPWS submission indicates this airstrip is located west of the Project. This is understood to be a typographical error as Mallee Cliffs National Park is located to the east of the Project.

b. Provide an acoustic (noise) monitoring program to ensure stated noise levels are adhered to and effects on Mallee Cliffs National Park are reported. If noise limits affecting NPWS estate exceed 40 dB(A) additional assessment and biodiversity monitoring is requested as part of the Biodiversity Management Plan.

The applicable assessment criterion for noise impacts within National Parks under the Noise Policy for Industry (NPfI) (NSW EPA, 2017) is 50 dB(A).

Similarly, the Wind Energy Guideline (DPHI, March 2024) and the Wind Energy Guideline Technical Supplement for Noise Assessment (Noise Technical Supplement) (DPHI, 2024) provide that predicted WTG noise levels, when adjusted for tonality and low-frequency noise, should not exceed L_{eq} 50 dB(A) at designated passive recreation areas within National Parks (when in use) for wind speeds of 4 metres per second (m/s) or cut-in speed, whichever is greater. The Noise Technical Supplement (DPHI, 2024) notes that projects typically meet the 50 dB(A) criterion if WTGs are set back 500 m from the National Park boundary. The nearest proposed WTG is setback approximately 800 m from the Mallee Cliffs National Park boundary.

This is reiterated in Section 5.2.1 of the Wind Energy Guideline (DPHI, 2024). While the Renewable Energy Planning Framework, inclusive of the Wind Energy Guideline, does not immediately apply to the Project (as the EIS was lodged before 12 November 2024), it is instructive in resolving any ambiguity in the pre-existing policy framework regarding the assessment of noise impacts within the National Park.

Figure 4.3 below shows highest predicted WTG noise level contours within Mallee Cliffs National Park, as presented in the Noise and Vibration Impact Assessment (Appendix 10 of the EIS).

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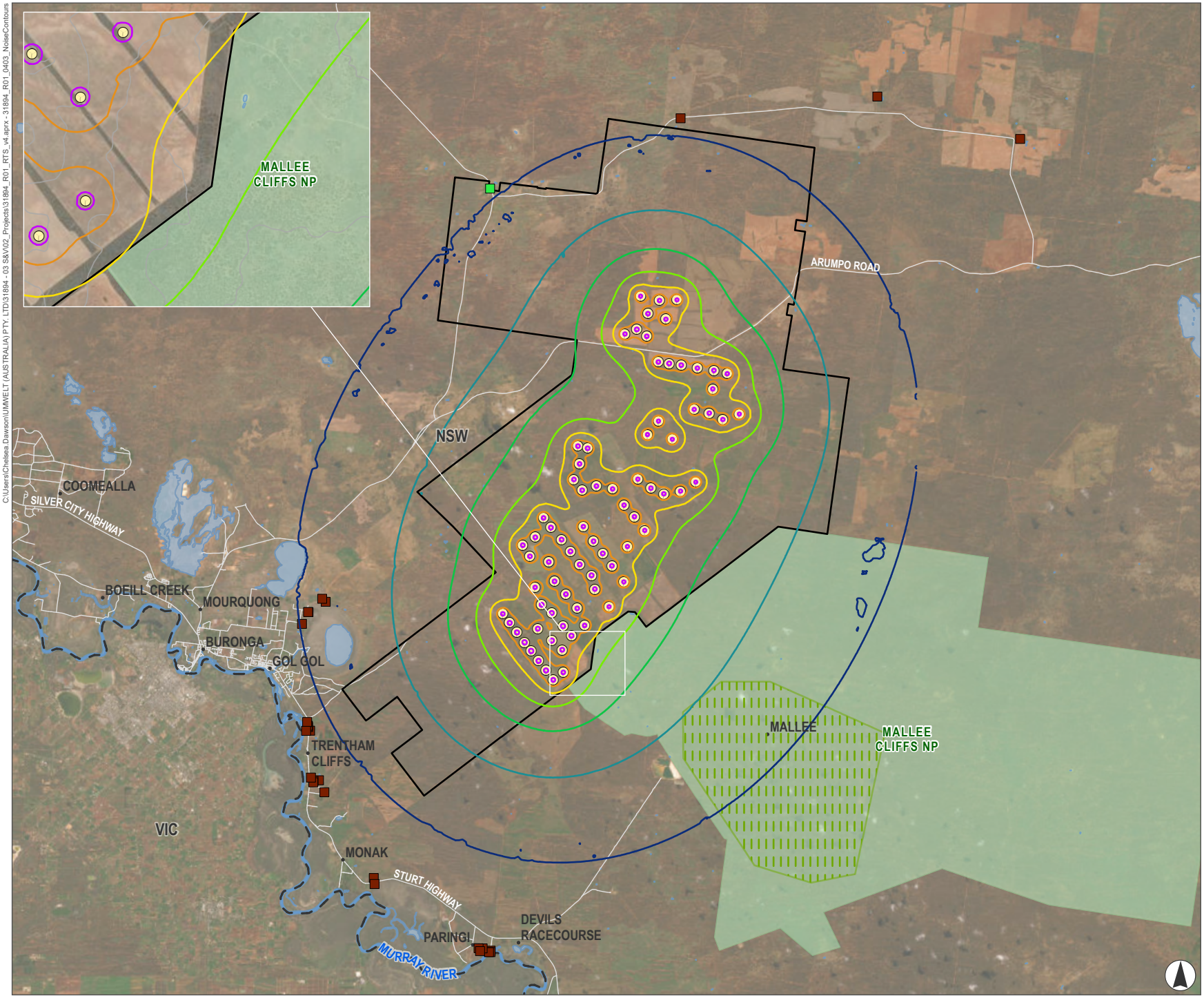


FIGURE 4.3

Predicted Wind Turbine Noise Level Contours – Mallee Cliffs National Park

Legend

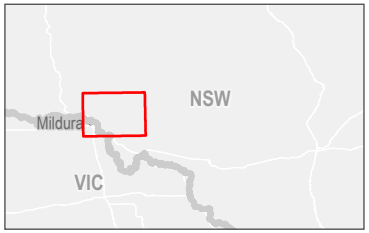
- Project Boundary
- Wind Turbine Generators
- Road
- Watercourse
- Waterbody
- NPWS Reserve
- Asset of Intergenerational Significance
- State Border

Dwellings

- Host Dwellings
- Non-associated Dwellings

Predicted noise contour (dB)

- 50
- 45
- 40
- 35
- 30
- 25
- 20



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Kilometres

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As shown in **Figure 4.3**, predicted WTG noise levels are in the order of 40 dB at the Mallee Cliffs National Park boundary, reducing to approximately 25 dB at the boundary of the Asset of Intergenerational Significance (AIS) area and further reducing to levels of 20 dB or less within the majority of the National Park.

These predicted noise levels represent conditions when the WTG noise emissions have reached their highest level (corresponding with hub height wind speeds of 20 m/s for the candidate WTG model) and the wind is directed from the Project to each receiver (refer to Section 6.2 in Appendix 10 of the EIS). Based on a reduced wind speed of 4 m/s (which is applied under the Noise Technical Supplement), predicted noise levels would be significantly reduced (refer to Appendix I of Appendix 10 of the EIS). This is important to note as Project noise levels will vary with wind speed (and direction) and those predicted and assessed at the Mallee Cliffs National Park boundary will not occur constantly, or for the majority of time across the year.

Additionally, it is noted that the L_{eq} 50 dB(A) criterion under the Noise Technical Supplement relates to human enjoyment within designated passive recreation areas (e.g. walking trails, picnic areas and scenic lookouts) only and does not apply to other areas of a National Park. There are no designated passive recreation areas present within Mallee Cliffs National Park. Since reservation, recreation has been excluded from Mallee Cliffs National Park as access to the park is via private roads over adjoining private land. As noted in Section 7.3.5.4 of the EIS (Umwelt, 2024), public access to the Mallee Cliffs National Park has been limited mostly to researchers and bird watching groups who visit a few times a year.

With respect to biodiversity impacts, Section 5.4.1 of the Wind Energy Guideline provides only that WTGs should be sited at least 100 m from the mapped boundary of National Parks in order to minimise the risk of bird and bat strike. As stated above, the Project design incorporates a minimum buffer of approximately 800 m between the National Park boundary and the nearest WTG.

Overall:

- Highest predicted noise levels at the Mallee Cliffs National Park boundary are substantially less than the 50 dB(A) criterion established under NPfI and Noise Technical Supplement and noise impacts within the remainder of the National Park are predicted to be very minor or negligible.
- Proposed WTG setbacks from the Mallee Cliffs National Park boundary are substantially greater than the minimum recommended setbacks for both noise and bird strike impacts under the Wind Energy Guideline and Noise Technical Supplement.

Accordingly, it is submitted that no further assessment or targeted monitoring is required. Further consideration of impacts to Mallee Cliffs National Park is provided in **Appendix K**.

4.2.14.4 Telecommunications

NPWS acknowledged that there is likely to be no direct impacts to telecommunication links (including NPWS RF links) due to the Project. However, NPWS stated that current VHF and future UHF PSN Trunking services may be indirectly impacted by turbines in proximity to the Mallee Cliffs National Park. On this basis, NPWS made the following recommendation:

> *NPWS request that Spark Renewables engage with NPWS post-construction if any issues arise with RF links, mobile radio performance, or NPWS communication systems (including VHF simplex channels and future UHF PSN Trunking services).*

Spark Renewables accepts this recommendation. This is reflected in the updated mitigation measures in **Appendix C** (refer to EMF02).

4.2.14.5 Ecological Management Plans

NPWS recommended that post approval management plans, specifically the BBAMP and BMP, be prepared in consultation with NPWS to ensure that they:

- Considers pest animal and weed management strategically, using management strategies delivered in collaboration with NPWS as an adjoining land manager
- Assesses the vehicle collision risk and impacts on wildlife in this locality with increased heavy vehicle movements, including night use of the roads for construction purposes.
- Ensures biosecurity and hygiene protocols are applied, having regard to Hygiene guidelines for invasive plants and pathogens (Save Our Species/DPIE, 2020).

Spark Renewables accepts this recommendation. This is reflected in the updated mitigation measures in **Appendix C** (refer to B04 and B19).

4.2.15 Rural Fire Service (RFS)

RFS feedback is extracted below, along with Spark Renewables' responses.

4.2.15.1 Implementation of Mitigation Measures

> *All Mitigation and Management Measures (identified as BF01 - BF15) in section 6.13.2.2 of the Environmental Impacts Statement prepared by Umwelt report number 22494/R26 dated November 2024 shall be implemented.*

Spark Renewables commits to the implementation of the updated mitigation measures outlined in **Appendix C**.

4.2.15.2 Provision of BFEMOP

> *A copy of the Bush Fire Emergency Management and Operations Plan shall be provided to the Local Emergency Management Committee for its information prior to the operation of the Turbine Wind Generators and occupation of the Temporary Workers Accommodation.*

Spark Renewables commits to provide a copy of the BFEMOP to the Local Emergency Management Committee post determination, in line with RFS advice. This is reflected in the updated mitigation measures in **Appendix C** (refer to BF01).

4.2.16 NSW Telco Authority

The NSW Telco Authority (NSWTA) advised that Project WTGs would be located at least 13 km from the nearest microwave (MW) link and therefore NSWTA has no concerns regarding impacts to the Public Safety Network (PSN). Spark Renewables acknowledges this submission and confirms no further comment, or assessment is required in this Submissions Report.

4.2.17 TfNSW

Traffic related matters raised by TfNSW have been addressed separately in the Amendment Report (Umwelt, 2026).

4.2.18 Transgrid

Transgrid feedback is extracted below, along with Spark Renewables' response.

4.2.18.1 Connection Processes Agreement

> *The Proponent will need to further engage Transgrid via a Connection Processes Agreement to facilitate an application to connect to Transgrid's network, in accordance with the NER. During the application stage, the assessment and approval of the proposed connection will include, but not limited to, performance standards and connection assets.*

Spark Renewables acknowledges Transgrid's advice and is committed further engagement with Transgrid with respect to its Connection Processes Agreement process, in accordance with the NER.

4.2.18.2 Tenure Agreements

> *It is Transgrid Group's expectation that all grid connection works are included in the Customer's approval documentation. The applicant will be responsible to procure all property related tenure arrangements as part of the project and consult with the Transgrid Group to further understand these requirements.*

Spark Renewables acknowledges responsibility for procuring all property related tenure arrangements and will continue to consult with Transgrid through the grid connection process.

4.2.19 WaterNSW

WaterNSW feedback is extracted below, along with Spark Renewables' responses.

4.2.19.1 Impacts to Groundwater Bores

> *WaterNSW has reviewed the EIS and note that there are several active and non-active groundwater bores located on the subject site. We expect a duty of care regarding these groundwater bores during construction and operational phases so as to prevent damage, and for ongoing WaterNSW access where required.*

All reasonable and feasible care will be taken to avoid damage to known groundwater bores in the vicinity of proposed works. This is reflected in the mitigation measures in **Appendix C** (refer to WR19).

4.2.19.2 Impacts to WaterNSW Monitoring Sites

> *There are also a number of WaterNSW flow gauging sites along the Local Transport Route (Arumpo Road) to which we will also require ongoing access, and which must be protected from impacts resulting from the project.*

A review of the WaterNSW Water Insights Portal (accessed September 2025) did not identify any flow gauges located on Arumpo Road. Following further consultation, WaterNSW confirmed via email correspondence to Umwelt dated 7 October 2025 that this comment was made in error.

While there are no flow gauges in this location, WaterNSW clarified:

> *There are at least three active groundwater monitoring sites that may potentially be impacted by works associated with the development proposal, with locations B and C taken from Figure 3 of Appendix 12 to the EIS...*

WaterNSW advised that there are two (2) monitoring sites (GW087083 and GW088479) located near the existing Quarry Access and another site (GW087531) located near the Project EnergyConnect Camp Access, which are identified as access points "B" and "C" in Figure 3 of the Traffic Impact Assessment (Appendix 12 of the EIS), reproduced in **Figure 4.4** below.

It is noted that the figure referenced by WaterNSW provides context for the local road network only and does not denote where Project-related road works are proposed to occur. Neither the existing Arumpo Bentonite Quarry on Arumpo Road (Access B) or the Project EnergyConnect Camp (Access C) form part of the proposed Project.

Spark Renewables may source material for the Project from the quarry during construction (refer to **Section 4.2.13.2**), however, this would occur pursuant to the quarry's existing approvals and no road upgrades are proposed at this location as part of the Project. Additionally, no usage of the Project EnergyConnect Camp is proposed, and this access point is shown for information only. Consequently, no impacts to these WaterNSW monitoring sites are anticipated due to the carrying out the Project.

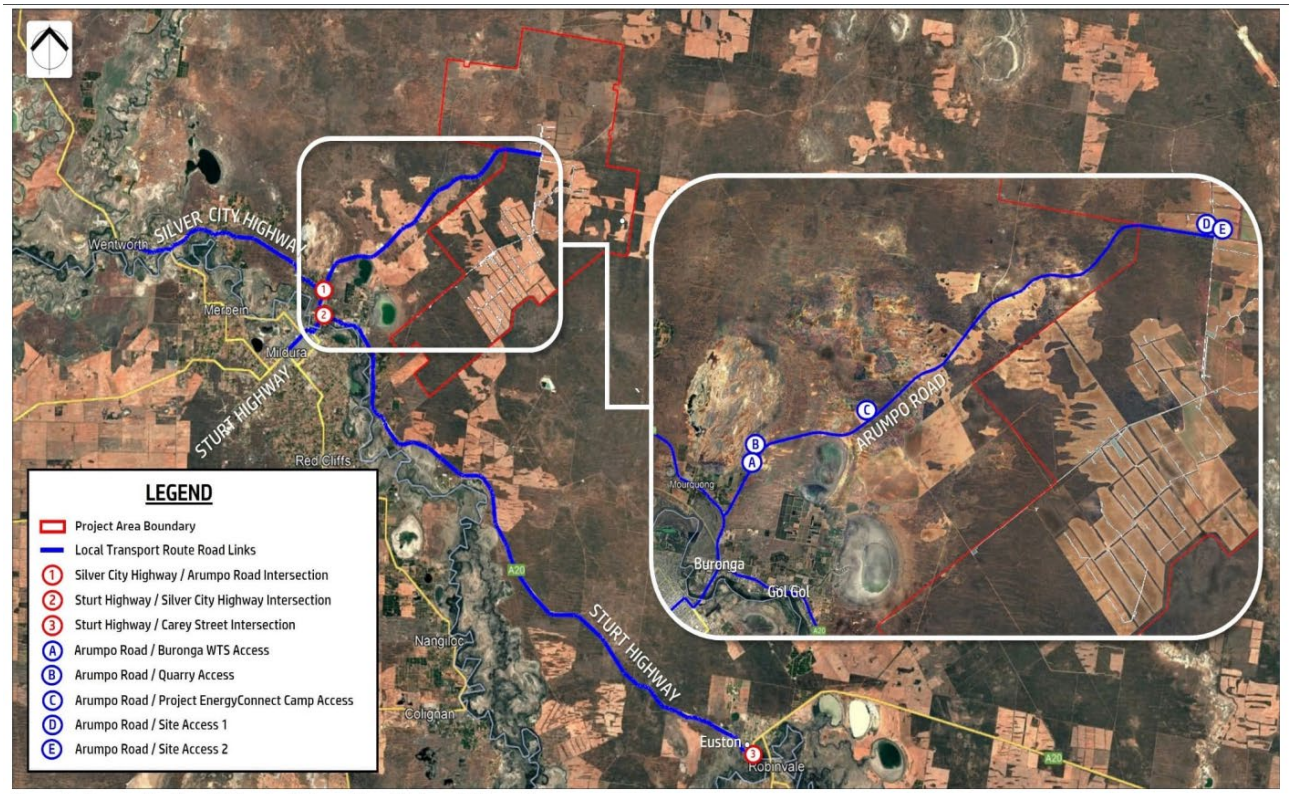

Figure 3 Surrounding Road Network – Relevant Road Links and Intersections

Figure 4.4 Road Network Map Referenced by WaterNSW

4.2.19.3 Water Licensing

Should the extraction of water from existing or new groundwater bores or water from other sources covered under the relevant water sharing plan be required, the proponent will need to apply for a Water Access Licence (WAL). Any such request will be assessed at time of application and are subject to availability.

Spark Renewables has committed to develop a water sourcing and monitoring strategy to manage potential availability impacts on downstream water users and ensure compliance with legislation relating to water extraction. This is reflected in WR17 in **Appendix C**.

5.0 Response to Public Submissions

As outlined in **Section 2.3**, 120 public submissions were received, including 119 submissions objecting to the Project and one (1) submission in support of the Project. Consistent with the requirements of the SSD Submissions Report Guidelines (DPHI, March 2024), the submissions have been grouped into the following main categories:

- the Project (e.g. the Project Area, the physical layout and design, key uses and activities, timing)
- procedural matters (e.g. level or quality of engagement, compliance with the SEARs, 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 with Government plans, policies or guidelines)
- issues that are beyond the scope of the Project (e.g. broader policy issues) or not relevant to the Project.

Several of the community and organisation submissions received were similar or had consistent themes. These similar themes have been grouped together where possible, and short extracts of the submissions have been provided in an effort to capture key sentiments. These extracts are shown in *italics* in the sections below.

5.1 The Project

This section addresses Project-related issues raised in public submissions. Consistent with the Submissions Report Guidelines, Project-related issues may include matters relating to the site, the Project Area, the physical layout and design, key uses and activities and timing. A total of 29 public submissions (24%) raised Project-related concerns, which have been grouped into four (4) key issues as outlined in the sections below.

5.1.1 General Site Suitability Concerns

Three (3) submissions raised general concerns regarding the general suitability of the site, commenting that the Project is simply not in the right location or is out of place in the region.

> *I object to the Mallee Wind Farm because of the location. Obviously major road traffic delays will occur, but more importantly this is a predominantly a low wind area. Solar farm is far more suited to this region of Australia. – CS48 (Name Withheld)*

The rationale for the selection of the Project Area is detailed in 2.7.2 and Section 7.2 of the EIS. In summary, the Project Area was selected based on a range of factors, including:

- its strategic position and access to approved transmission infrastructure
- the reliability of the wind resource

- the pre-cleared nature of much of the Project Area, which enables all WTGs and key infrastructure to be located within previously cleared cropping land, thereby minimising impacts to biodiversity and cultural heritage values
- the absence of any non-associated dwellings within 10 km of proposed WTGs, meaning that the Project's visual and noise impacts are likely to be some of the lowest of any wind farm proposed in NSW
- landholder support for co-existence of agriculture and renewable energy.

Wind resource mapping is provided in Figure 2.1 of the EIS, which demonstrates that the Project Area is well suited to wind development.

5.1.2 Proximity to Sensitive Receivers and Townships

A total of 19 submissions raised concerns about the Project's proximity to dwellings and nearby townships of Buronga and Gol Gol (BGG), and to the impact of the Project on potential residential expansion (e.g. subdivisions) at the fringes of those townships.

> *We are a very close neighbour and are concerned about the closeness to our home, our community and the environmental impact to our region.– CS35 (Peta Cameron)*

The Project has been designed and progressively refined to minimise impacts to existing residences and nearby townships. The proposed WTGs are located at least ten (10) km away from the nearest non-associated residence. Detailed specialist studies undertaken as part of the EIS indicate that:

- The Project meets the visual magnitude performance objectives at all non-associated residences, as defined by the Wind Energy: Visual Assessment Bulletin (the Visual Bulletin) (DPE, 2016).
- Construction noise at all non-associated residences is predicted to remain below noise affected management level of 45 dB $_{LAeq,\ 15\ min}$ under the Interim Construction Noise Guideline (ICNG) (Department of Environment and Climate Change, 2009).
- Operational noise at all non-associated residences is predicted to remain below the relevant noise criterion of 35 dBA $_{LAeq\ 10min}$ under the NSW Noise Assessment Bulletin (Noise Bulletin) (DPE, 2016).
- During construction, dust impacts would generally be localised within the Project Area and are unlikely to extend more than 250 m beyond the Project Boundary. As detailed above, the closest non-associated residence is over ten (10) km from the Disturbance Footprint.

Consequently, no significant amenity impacts to existing residences in the vicinity of the Project are expected.

With respect to potential future dwellings, two (2) vacant lots with dwelling entitlements were identified within 3750 m of the nearest WTG (black line of visual magnitude), however, as only a very small part of these lots falls within both the black line and the blue line of visual magnitude (5500 m from nearest WTG), this should not significantly impede the siting of a future residence on those lots (refer to Figure 20 in Appendix 9 of the EIS).

Spark Renewables has also consulted with Council regarding approved subdivisions in the vicinity of the Project Area. As at the time of finalising this report, no approved subdivisions have been identified by Council within 3750 m of any WTG.

Other environmental and community impacts are considered in **Section 5.3** below.

> *The Wind Farm and associated infrastructure can be located further away from BGG as there is ample area within the Project Site to move all the wind turbines north east by 10 kilometres to the northern part of the Project Site. This would significantly reduce the impacts on BGG with only marginal impacts on the Project itself. BGG is currently growing quickly and is viewed as one of the desirable locations for young families to live in the greater Sunraysia area. Both Wentworth Shire and the NSW Government are investing in the growth of the area. The Mallee Wind Farm will run counter to this. – CS105 (Wheeldon Amigh Pty Ltd)*

The Landscape and Visual Impact Assessment (LVIA) provided in Appendix 9 of the EIS provided an assessment of impacts to the nearest townships of Buronga (~16 km southwest), Gol Gol (~13 km southwest) and Mildura (~17 km southwest). These townships are identified collectively as Landscape Character Unit (LCU) 04 'Local Townships' in the LVIA.

The Project design incorporates a substantial buffer between the proposed WTGs and the nearest areas where further residential development could potentially occur under current planning controls, as shown in **Figure 5.1**. For example, the proposed WTGs are located more than 11 km from land at North Gol Gol zoned RU4 (Primary Production Small Lots) and R5 (Large Lot Residential).

The LVIA concludes that visual impacts to LCU 04 as a result of the Project will be low, as existing vegetation and built structures will likely fragment views of the Project, and due to the substantial separation distance, the Project is unlikely to have an impact on the character of the townships. Given the low level of impact predicted, and the lack of any detailed plans for future urban expansion in close proximity to the Project, it is considered highly unlikely that the Project will significantly impede future development of the nearby townships.

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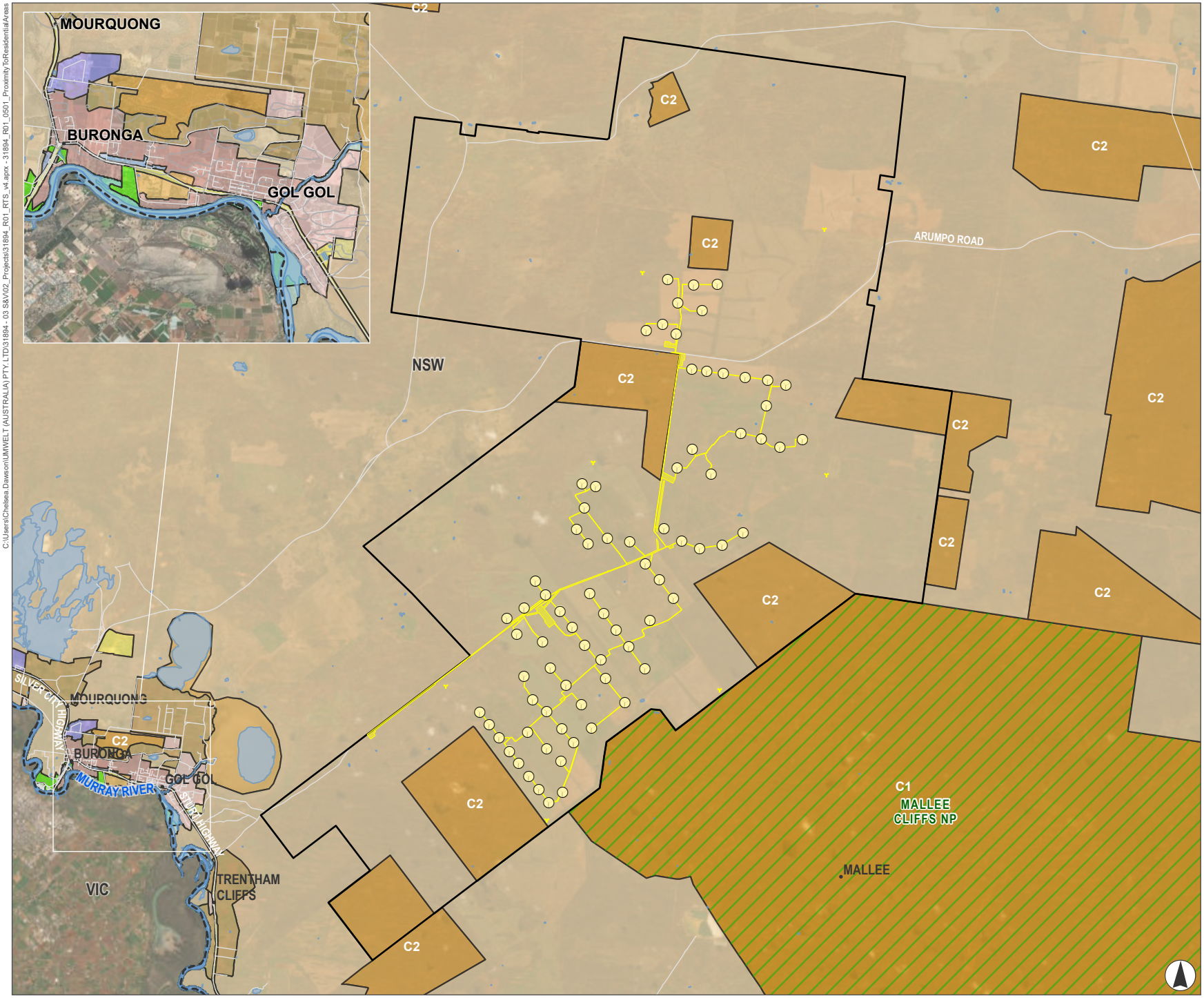

FIGURE 5.1

Proximity to Residential Areas and Townships

Legend

- Wind Turbine Generators
- Project Boundary
- Disturbance Footprint
- Road
- Watercourse
- Waterbody
- NPWS Reserve
- State Border

Land Zoning

- C1 - National Parks and Nature Reserves
- C2 - Environmental Conservation; C2, Environmental Management
- C3 - Environmental Management
- E1 - Local Centre
- E3 - Productivity Support
- E4 - General Industrial
- R5 - Large Lot Residential
- RE1 - Public Recreation
- RE2 - Private Recreation
- RU1 - Primary Production
- RU4 - Primary Production Small Lots
- RU5 - Village
- SP1 - Special Activities
- SP2 - Infrastructure
- W1 - Natural Waterways
- W2 - Recreational Waterways

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Kilometres

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The EIS inadequately considers the Buronga Gol Gol Structure Plan which incorporates a high residential growth rate and expansion east and north of Gol Gol.
– CS58 (Grand Junction Pty Ltd)

The Buronga Gol Gol Structure Plan 2020 indicates that Council is seeking to consolidate residential development, primarily within areas currently zoned RU4 and RU5 (Village), as shown in **Figure 5.2** and **Figure 5.3** below. These areas remain at least 11 km from the nearest proposed WTG, as discussed above.

Consultation with Council during December 2025 to January 2026 did not identify any further land use strategies currently in preparation to expand residential development in the direction of the Project.

A search of the NSW Planning Portal undertaken in December 2025 did not identify any current planning proposals to rezone land in North Gol Gol such that residential development would expand significantly in a northerly or north-easterly direction, towards the Project.

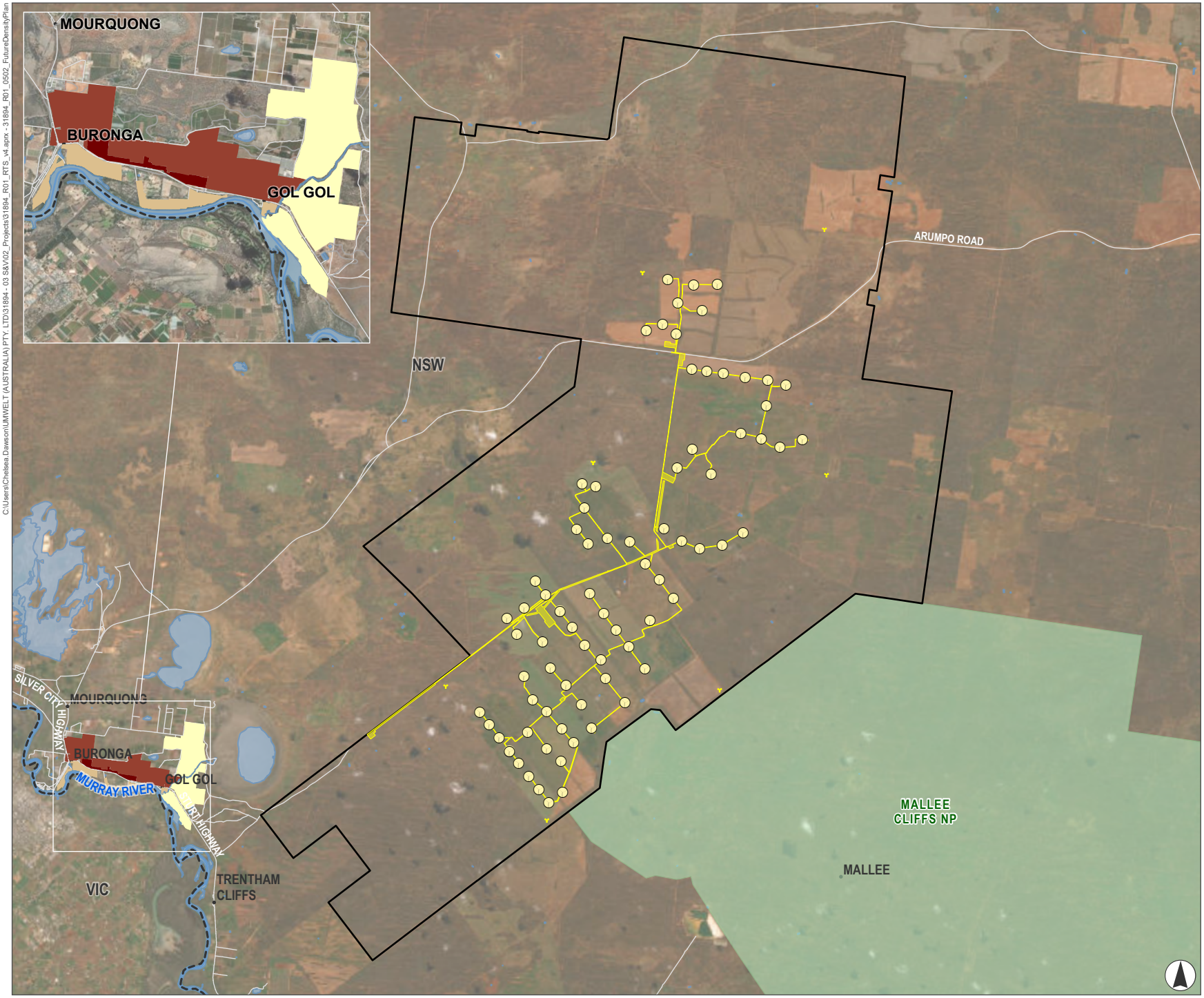

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FIGURE 5.2

Future Density Plan – Buronga Gol Gol Structure Plan 2020

Legend

- Wind Turbine Generators
- Project Boundary
- Disturbance Footprint
- Road
- Watercourse
- Waterbody
- NPWS Reserve
- State Border

Buronga Gol Gol Structure Plan - Future Density Plan

- High
- Low

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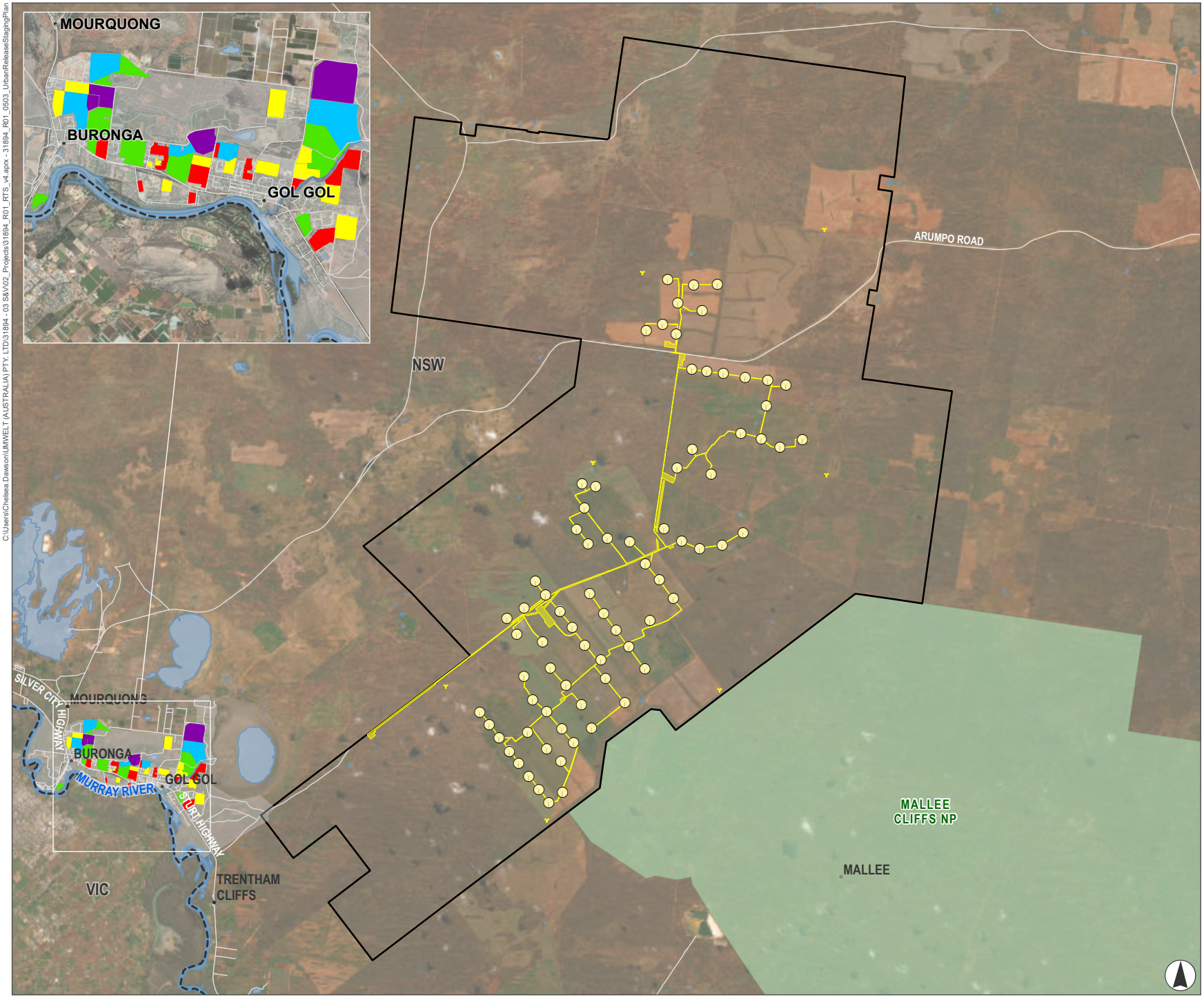

FIGURE 5.3

Urban Release Staging Plan – Buronga Gol Gol Structure Plan 2020

Legend

- Wind Turbine Generators
- Project Boundary
- Disturbance Footprint
- Road
- Watercourse
- Waterbody
- NPWS Reserve
- State Border

0 5 10

Kilometres

Scale 1:220,000 at A4
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5.1.3 Proximity to National Park

A total of 13 submissions raised concerns regarding the Project's proximity to the Mallee Cliffs National and Mungo National Park.

> *The location of this project is adjacent to Mallee Cliffs National Park with turbines within 800 m of the park boundary. Fauna does not respect boundaries and will likely result in high numbers of avian fauna deaths by blade strike. The cumulative effect from multiple wind projects in the district also must be considered. Offsets will not cure the destruction from this and the cumulative projects in the SW REZ. – CS96 (CWO REZist Inc.)*

As discussed in Section 7.0 of the EIS, the BDAR (Appendix 6 of the EIS) has considered a EUROBAT Publication article by Rodrigues et al (2015) regarding the proximity of WTGs to the National Parks Estate comprising Mallee Cliffs National Park. This article suggests that WTGs should be located a minimum of 200 m away from woodlands and forests (or structures that would provide substantial habitat for microbats) to minimise potential WTG strike impacts to microbats.

Following the lodgement of the EIS, the Wind Energy Guideline was released in November 2024. Section 5.4.1 of the Wind Energy Guideline states that:

> *Turbines should be sited at least 100 m (from blade tip to nearest canopy height) away from the mapped boundary of national parks, state conservation areas and nature reserves.*

While the Wind Energy Guideline does not apply to the Project,[7] the guideline is instructive in resolving previous gaps in NSW guidance.

The closest WTG (T9) is located approximately 800 m from the boundary of the Mallee Cliffs National Park (at the western-most point of the National Park), well in excess of recommended buffer distances set out both in the Wind Energy Guideline and in Rodrigues et al (2015).

Bird strike risks are discussed further in **Section 5.3.1**. Cumulative impacts are discussed in **Section 5.3.10**.

> *I normally would be in support of a wind farm, because I want climate action. However, in this instance, this project is located too close to Mallee Cliffs National Park and this could pose risks to the native fauna and aesthetics of the park. – CS98 (Name Withheld)*

The LVIA concludes that the potential impacts to the aesthetics of the Mallee Cliffs National Park will be limited, due in part, to the restricted public access within the National Park. The Mallee Cliffs National Park forms part of LCU 05 'National Parks and Conservation Areas' identified in the LVIA. The LVIA indicates that visual impacts to LCU 05 will be low, and that overall, the Project is unlikely to degrade the scenic values of the Mallee Cliffs National Park.

[7] Under the transitional arrangements for the Renewable Energy Planning Framework, the guideline does not apply as the EIS was lodged prior to 12 November 2024.

Impacts to biodiversity within Mallee Cliffs National Park are discussed in **Section 5.3.1**.

> *I object to the Mallee Wind Farm because it is way too close to Mallee Cliffs NP home to endangered mallee fowl. Also too close to the road to Mungo NP, people don't want to see wind farms on the drive to a world heritage national park.– CS111 (Name Withheld)*

Mungo National Park is located approximately 50 km north east of the Project, and the Project is not expected to be visible from this location.

The LVIA indicates that visual impacts from the Project at public viewpoints will generally be low, except for select locations on Arumpo Road. Arumpo Road has a low viewer sensitivity level and there were no noted landscape features impacted by the Project from these locations. Additionally, any views would be fleeting, with vehicles travelling at speed and with partial screening from intervening vegetation.

Biodiversity within the Mallee Cliffs National Park, including impacts to mallee fowl, are discussed in **Section 5.3.1**. An overall summary of impacts to Mallee Cliffs National Park is then provided in **Appendix K**.

5.1.4 Project Design & Interactions with Euston Mineral Sands Project

A submission was received from Illuka (CS09) which raised a range of concerns, particularly in relation to interactions with the heavy mineral resource located within AL24.

Illuka has previously announced that it is in the early planning stages of the Euston Mineral Sands Project (mineral sands project). It is understood that SEARs were previously issued for the mineral sands project, however the project is no longer visible on the Major Projects website as of January 2026.

Based on limited information currently available, the mineral sands project:

- Was planned approximately 25 km east of Mildura and included five (5) separate deposits, largely adjacent to one another over a combined distance of 62 km, including within AL24.
- Involved the development of mining and mineral processing infrastructure, including open cut mine pits, processing plant, water storage dams for water and clay fines management, material stockpiles and associated supporting infrastructure (Illuka Resources Limited).

Project design related issues raised by Illuka's submission are discussed in **Section 5.1.4.1** and **Section 5.1.4.2** below. Procedural matters raised by Illuka are then discussed separately in **Section 5.2.2**.

5.1.4.1 Potential Resource Sterilisation

Illuka's submission (CS09) raised concerns regarding potential resource sterilisation as a result of the proposed Project layout:

> *The current placement of the Wind Farm Project's infrastructure will result in sterilisation of heavy mineral resource, jeopardising the overall economic and operational viability of the Euston Project. Of particular concern are the*

southernmost transects, which represent access tracks and possibly buried infrastructure, as opposed to the Dansons Road crossing which Iluka understands is an overhead line that could traverse the mine pit. Given Iluka's intention to use an open-cut mining method, this infrastructure placement effectively sterilizes substantial volumes of the mineral resource.

Spark Renewables has attempted to engage further with Illuka regarding interactions within the indicative mine footprint during the preparation of the Submissions Report (refer to **Section 3.2.2**). Spark Renewables has also committed to further consider resource sterilisation during detailed design, in consultation with the title holders. This is reflected in the updated mitigation measures for the Project (refer to RES02 in **Appendix C**).

5.1.4.2 Proximity of Infrastructure to AL24 and Potential Failure Exclusions Zones

Illuka's submission (CS09) also raised concerns regarding the geotechnical stability of proposed WTGs located in proximity to the indicative mine footprint:

Having regard to Spark's current design, there are four Wind Turbine Generators (WTG's) located within close proximity to Iluka's preliminary pit designs. Spark has not confirmed that the WTGs have adequate geotechnical setbacks from the pits to allow for the safe extraction of the mineral resource in the event of a WTG failure. – CS09 (Illuka)

Two (2) WTGs (16 and 17) are proposed to be sited within AL24, however, these are set back approximately 200-300 m from the indicative mine footprint presented by Illuka in a Scoping Report dated January 2023. A further two (2) WTGs (14 and 15) are outside AL24, within approximately 300 m of the indicative mine footprint. The placement of these WTGs is not expected to create any impediment to future mining in the indicative mine footprint. Any potential interactions would be managed through a combination of micro-siting and detailed design (e.g. geotechnical assessment to ensure the stability of the WTGs during mining).

Spark Renewables has committed to:

- Further consider potential resource sterilisation during detailed design and in consultation with relevant title holders.
- Seek to minimise adverse interactions with AL24 where practicable, including through:
    - Micro-siting of infrastructure
    - Geotechnical investigation to ensure the stability of any WTGs in close proximity to the proposed mine footprint (i.e. WTGs 14 to 17).

This is reflected in the updated mitigation measures for the Project (refer to RES02 in **Appendix C**). Subject to the proposed mitigation measures, the Project is considered to be compatible with the future extraction or recovery of mineral resources within the Project Area.

5.2 Procedural Matters

This section addresses procedural matters raised in public submissions. Consistent with the Submissions Report Guidelines, procedural matters may relate to the level or quality of engagement, compliance with the SEARs, or the identification of relevant statutory requirements. A total of 11 public submissions (9%) raised procedural matters, which have been grouped into three (3) issues as outlined in the sections below.

5.2.1 Engagement

Seven (7) submissions raised Project-specific concerns regarding the level of engagement undertaken during the preparation of the EIS. The submissions cited distrust among local residents, exacerbated by concerns over noise, visual pollution, and potential health impacts (CS102, Rainforest Reserves Australia).

> *Residents are concerned they were not adequately consulted and feel the decision is being forced upon them. – CS19 (Name Withheld)*

Extensive engagement with the local community has been undertaken during the Scoping and EIS phases of the Project, as summarised in **Table 5.1**. This engagement has continued during the preparation of this Submissions Report, with a community information session held at the Buronga Midway Centre during the EIS exhibition in November 2024, pop-up information stalls at Mildura Field Days (May 2025) and the Wentworth Show (August 2025) and community newsletter updates in April 2025 and January 2026.

It is noted that this summary relates to consultation with the general community and does not include targeted consultation with host and proximal landowners, Traditional Owners, Council and local training and accommodation providers. Further detail regarding the full engagement program is provided in Appendix 11 of the EIS.

On this basis, it is submitted that engagement undertaken to date is consistent with Undertaking Engagement Guidelines for State Significant Projects (DPHI, March 2024).

Submissions from Iluka and Grand Junction Pty Ltd[8], both raised specific concerns about the extent to which they have been consulted in relation to the Project. In this regard:

- Spark Renewables has sought to engage further with Illuka during the preparation of the Submissions Report (refer to **Section 3.2.2**).
- Targeted consultation with Grand Junction Pty Ltd occurred prior to, during and following the EIS exhibition. However, Spark Renewables understands that this submitter no longer holds an interest in the neighbouring property as at the time the Submissions Report was finalised.

[8] Grand Junction Pty Ltd is an owner of Lot 2 DP 1233260, which forms part of Woorlong Station, which is immediately southwest of the Project Area.

Table 5.1 Summary of Broader Community Consultation

Mechanism Used	No. of Participants Contacted / Consulted During Scoping Phase	No. of Participants Engaged During Scoping Phase	No. of Participants Contacted / Consulted During EIS Phase	No. of Participants Engaged During EIS Phase	No. of Participants Contacted / Consulted During Submissions Report Phase	No. of Participants Engaged During Submissions Report Phase
Project Information Sheet	One (1) Newsletter Distribution to ~1,100 households	-	Four (4) Newsletters Distribution to Project mailing list of 131 emails Distribution to ~1,200 households	-	Two (2) Project Update Newsletters Distributed to Project mailing list of 161 emails	-
Drop-in Session	-	22	-	5	-	-
Mildura Field Days Pop Up Stall	-	-	-	~124 (Combined total from 2023 and 2024 events)		~68
Wentworth Show Pop Up Stall	-	-	-	~78		~70
EIS Summary Information Sheet	-	-	Distribution to project mailing list of 131 emails Discussed with stakeholders at Wentworth Show	-	-	-
Targeted Briefings (Local Community, Environmental and Special Interest Groups)	10	4	5	3	-	-
Media Release	5	4	-	-	-	-
Project Website	-	-	-	-	-	-

5.2.2 EIS Considerations

Six (6) submissions raised concerns regarding the extent to which the EIS considered relevant policy and statutory requirements and the Project SEARs. These matters are discussed in **Section 5.2.2.1** to **Section 5.2.2.3** below.

5.2.2.1 Application of Renewable Energy Planning Framework

> *The EIS was released just after NSW's new Renewable Energy Planning Framework was released. The EIS has not considered the new Framework or the Transitional Arrangements that apply to the Project / EIS. The EIS should be re-exhibited with a Supplementary Report dealing with the Framework and Transitional Arrangements. Specifically, this needs to include a review of the development rights of neighbouring landholders for residential accommodation, tourist and visitor accommodation or eco-tourism (permitted in Wentworth RU1 Zone). – CS57 Grand Junction Pty Ltd*

On 12 November 2024, the NSW Government released the Renewable Energy Planning Framework, a series of guidelines applying to all state significant large-scale wind, solar and transmission projects. The implementation of the framework is subject to transitional arrangements to ensure procedural fairness for applicants and stakeholders. Consistent with the transitional arrangements, the framework (including consideration of development rights) does not apply as the EIS was lodged prior to 12 November 2024.

5.2.2.2 Consideration of Land in SEARs

> *Spark's EIS (refer to Section 6.10 and Appendix 14) does not include "an assessment of the potential impacts of the development on existing land uses on the site and adjacent land, including consideration of … mineral rights" as required by the SEARs. Spark has not assessed several key impacts as part of this process, including restricted access to a known mineral deposit, hindrance to extraction and mining activities, sterilization of parts of the resource thereby reducing the overall viability of the mining project, and loss of economic opportunities due to decreased mining activities in the area. None of these issues have been considered or addressed in Spark's EIS.* -CS09, Illuka Resources Limited

Spark Renewables has committed to additional mitigation measures to address Illuka's concerns (refer to **Section 1.1** and **Section 5.1.4**). Accordingly, the Project is not expected to impede the future recovery of mineral resources, or the potential economic opportunities that may be realised as a result.

5.2.2.3 Relevant Statutory Considerations

EP&A Act

> *s.4.15 of the Environmental Planning and Assessment Act 1979 (NSW) - Spark has not adequately assessed the likely environmental, social, and economic impacts of the proposed Wind Farm Project, nor has it sufficiently considered the suitability of the site and the public interest;* CS09, Illuka Resources Limited

The EIS provides a detailed assessment of the likely environmental, social and economic impacts of the Project, as well as the suitability of the site, and consideration of the public interest, particularly within Section 6.0 and Section 7.0 and supporting specialist studies. Spark Renewables has committed to additional mitigation measures to address Illuka's concerns (refer to **Section 1.1** and **Section 5.1.4**). Accordingly, the Project is not expected to impede the future recovery of mineral resources, or the potential social and economic benefits that may be realised as a result, and the Project is considered to be in the public interest.

> *Environmental Planning and Assessment Act 1979: The lack of genuine community consultation violates Division 2, which mandates inclusive and transparent processes – CS102 Rainforest Reserves Australia*

Project engagement is discussed further in **Section 1.1** and **Section 5.2.1**. Based on the extensive engagement already undertaken, as well as planned engagement during the development of post approval management plans and strategies, it is submitted that the relevant requirements of the EP&A Act have been met.

BC Act

> *Biodiversity Conservation Act 2016: Fails to include comprehensive plans for mitigating impacts on threatened species, in breach of Section 6.5. – CS102 Rainforest Reserves Australia*

The Revised BDAR (**Appendix D**) includes a comprehensive range of measures to mitigate the biodiversity impacts of the Project. As is standard for State Significant projects, comprehensive plans and strategies will be developed to implement these commitments post-determination.

Mining Act 1992

> *The Application does not appropriately address the rights and duties of leaseholders under the Mining Act, particularly in relation to the protection and sustainable development of mineral resources within the affected leases.* CS09, Illuka Resources Limited

As discussed above, Spark Renewables has committed to additional mitigation measures to address Illuka's concerns (refer to **Section 3.2.2** and **Section 5.1.4**). Accordingly, the Project is not expected to significantly impede resource recovery within AL24.

WM Act

Water Management Act 2000: Insufficient safeguards for protecting sensitive wetlands contravene Part 3 of the Act. – CS102 (Rainforests Reserve Australia)

As stated in Section 3.2 of the BDAR (Appendix 6 of the EIS), there are no wetland communities or ephemeral wetland PCTs present within the Development Footprint or within the Biodiversity Study Area. The Commonwealth Government's Protected Matters Search Tool (PMST) identified three (3) wetlands of international importance within 200 km of the Project Area. These include:

- Banrock Station Wetland Complex (approximately 200 km west of the Biodiversity Study Area)
- Riverland (approximately 150 km west of the Biodiversity Study Area)
- The Coorong and Lakes Alexandria and Albert Wetland (approximately 400 km west of the Biodiversity Study Area).

These wetlands would not be impacted by the Project.

The absence of a detailed strategy to prevent contamination of Lake Gol Gol and surrounding wetlands, despite clear risks of nutrient runoff and sedimentation, violates key water management regulations. – CS102 (Rainforests Reserve Australia)

Spark Renewables has committed to a range of measures to manage erosion and sedimentation risks, as set out in **Appendix C** (refer to WR01 to WR14). As is typical for State Significant projects, detailed Erosion and Sedimentation Control Plans (ESCPs) will be developed post-determination and will address all stages of the Project from construction to decommissioning.

State Environmental Planning Policy (Resources and Energy) 2021

Spark's EIS does not adequately consider the NSW State Environmental Panning Policy (Resources and Energy) 2021 (NSW). Section 2.19 of the Policy has specific reference to the compatibility of proposed developments with significant mineral resources. The Policy requires the consent authority to consider how the proposed development will interact with significant mineral resources. This includes evaluating whether the development is likely to have a significant impact on current or future extraction or recovery of minerals, ways in which the development may be incompatible with future recovery or extraction and evaluate any measures proposed by Spark to avoid or minimise incompatibility. -CS09, Illuka Resources Limited

Section 2.19(1) of State Environmental Planning Policy (Resources and Energy) 2021 (Resources and Energy SEPP) states that this provision applies to land:

a) in the vicinity of an existing mine, petroleum production facility or extractive industry, or

b) identified on a map (being a map that is approved and signed by the Minister and copies of which are deposited in the head office of the Department and publicly available on the Department's website) as being the location of State or regionally significant resources of minerals, petroleum or extractive materials, or

c) identified by an environmental planning instrument as being the location of significant resources of minerals, petroleum or extractive materials.

The Project Area is not in the vicinity of an existing mine, petroleum production facility or extractive industry, noting the Euston Mineral Sands Project is still in its early planning stages. Additionally, it is understood that no land has been identified on a map under subsection (b) and the land is not identified by an environmental planning instrument as being the location of significant resources of minerals, petroleum or extractive materials. Accordingly, Section 2.19 of the Resources and Energy SEPP does not apply to the Project. Nevertheless, an updated Statutory Compliance Table is provided in **Appendix B**, which addresses relevant considerations for the consent authority under Section 2.19.

State Environmental Planning Policy (Transport and Infrastructure) 2021 (T&I SEPP) – Regional Cities

BGG is currently growing quickly and is viewed as one of the desirable locations for young families to live Ian the greater Sunraysia area. Both Wentworth Shire and the NSW Government are investing in the growth of the area. The Mallee Wind Farm will run counter to this.

The NSW Wind Guidelines at Paragraph 2.2.2 specifically identify that:

"for wind energy developments to be approved near certain regional cities, the consent authority will need too be satisfied that any urban land conflicts, impact on urban growth potential and important scenic values are not significant".

While BGG is not currently listed as a regional city it should be as it is growing quickly and together with its Victorian twin town, Mildura, its population is far larger than that of some of the regional cities listed. The same principle should be applied and the Mallee Wind Farm's impacts one BGG should be assessed as a regional city. The flat landscape around BGG mean the Mallee Wind Farm will be highly visible. In addition the development will have numerous impacts on BGG including transport congestion and availability off services.- CS105 (Wheeldon Amigh Pty Ltd)

Neither Buronga or Gol Gol are identified as a 'regional city' on the Regional Cities Map under State Environmental Planning Policy (Transport and Infrastructure) 2021 (T&I SEPP). Consequently, the mandatory considerations under Section 2.42 of the T&I SEPP do not apply to the Project. Nevertheless, the potential impacts of the Project on future expansion of these townships is considered further in **Section 5.1.2**.

5.2.3 Public Exhibition Process

Three (3) submissions raised procedural matters associated with the DPHI's public exhibition processes. These submissions commented that the public exhibition period was too short and requested flexibility to provide further submissions at a later date. Submissions also commented that a public hearing should be held in relation to the Project. While these are matters for the consent authority to consider, it is noted that:

- No supplementary public submissions were provided to Spark Renewables subsequent to the closing of the exhibition period
- It is anticipated that community members will have an opportunity to make further submissions and participate in the IPC determination process.

One submission also raised concerns that the length of the exhibition period was insufficient to allow Council to provide a detailed response. A late submission was received from Council in October 2025 and has been duly addressed in this Submissions Report (refer to **Section 4.1**).

5.3 Economic, Environmental and Social Impacts of the Project

This section addresses Project-specific economic, environmental and social impacts raised in public submissions. Additional issues which were not specific to the Project, and related to wind farm developments generally, are addressed separately in **Section 5.5**.

A total of 61 public submissions (51%) raised Project-specific matters relating to the economic, environmental and social impacts of the Project, which have been grouped into 14 issues as outlined in the sections below.

5.3.1 Biodiversity

A total of 33 submissions raised Project-specific concerns regarding biodiversity, which are discussed in the sections below.

5.3.1.1 Impacts to Endangered Birds

> *I am particularly concerned about the impact on the critically endangered birds. The disruption of their habitat could have severe consequences for their already declining populations. – CS40 (Name Withheld)*

The Revised BDAR includes a updated Prescribed Impacts Assessment (refer to Appendix B of **Appendix D**) which considered the Project's likely impacts to bird species which were recorded within, or are likely to occur within, the Project Area. The Prescribed Impacts Assessment was informed by extensive Bird and Bat Utilisation Surveys (BBUS) undertaken over eight (8) seasons between November 2022 and August 2024. The assessment also included consideration of cumulative impacts associated with other proposed wind farm developments surrounding the Project.

A total of 124 bird species were recorded in the Project Area between November 2022 and August 2024 including 14 threatened species listed under the BC Act and/or the EPBC Act.

Of the 15 assessed threatened/migratory bird species that were recorded in the Project Area a total of three (3) were assigned a High risk rating, three (3) were assigned a Moderate risk rating, one (1) was assigned a Minor risk rating and the remaining eight (8) were assigned a Negligible risk rating.

Of the 23 threatened bird species that were not recorded during the 2022–2024 surveys but are likely to occasionally occur in the Project Area three (3) species were assigned a Moderate risk rating, 12 were assigned a Minor risk rating and eight (8) were assigned a Negligible rating.

It is noted that the risk ratings identified above are unmitigated, and with the implementation of proposed mitigation measures, these assigned risk ratings are reduced (refer to Appendix B in **Appendix D**).

Spark Renewables has committed to develop and implement a Bird and Bat Adaptive Management Plan (BBAMP) to monitor and mitigate the risk of bird strike (refer to B21 in **Appendix C**). The overall objective of the BBAMP will be to ensure the wind farm development does not result in a significant impact on birds and bats by retaining viable local populations of threatened species.

The BBAMP will be informed by:

- Further bird and bat utilisation surveys and targeted bird surveys (in addition to those already completed during the preparation of the EIS).
- A carcass search program to estimate the frequency of bird and bat mortality due to collision at the Project, from which the total number of collisions can be determined.
- The BBAMP will also include detailed Impact Triggers and Response Procedures, including protocols for notifying State and Commonwealth agencies (depending on the listing status of the affected species) of specified mortality events and determining (in consultation with the agencies) whether mitigation measures should be implemented. These mitigation measures would be set out within the BBAMP, and may include (amongst other measures):
- Alteration of WTG cut-in speeds
- Temporary shutting down of WTGs
- Acoustic deterrents
- Offsetting of impacts.

Further details regarding the conceptual components of the future BBAMP are outlined in the Revised BDAR (refer to **Appendix D**).

> *I am concerned about the impact of the transmission lines on the critically endangered Regent Honeyeater (Anthochaera phrygia). These birds are already struggling, and further habitat disruption could be catastrophic – CS47 (Name Withheld)*

The Regent Honeyeater *(Anthochaera phrygia)* was not recorded within the Project Area and has not been identified as likely to occur within the Project Area.

5.3.1.2 Impacts to Mallee Bird Community of the Murray Darling Depression Bioregion Endangered Ecological Community (EEC)

The project will affect a site spanning 57,330.31 hectares, with a disturbance footprint covering approximately 444.69 hectares. This area will directly impact the Mallee Bird Community, a component of the endangered ecological community (EEC) recognized under the Environment Protection and Biodiversity Conservation (EPBC) Act. – CS62 (Carolyn EMMS)

Avoidance of the Mallee Bird Community of the Murray Darling Depression Bioregion Endangered EEC has been a key design priority for the Project since inception. Mallee woodland communities which provide habitat for this EEC have been avoided as far as possible to reduce impacts on this EEC.

The biodiversity constraints report prepared as part of the scoping stage of the Project (Umwelt 2022) mapped approximately 188 ha of habitat for the Mallee Bird Community of the Murray Darling Depression Bioregion EEC. The current Development Footprint contains approximately 22.76 ha of habitat for this EEC, a substantial reduction in the area of impact through design by Spark Renewables. These residual impacts will be offset under the NSW Biodiversity Offset Scheme (BOS) through ecosystem credits for Plant Community Types (PCTs) 170 and 171.

On this basis, the Revised BDAR concluded that the Project is not likely to have a significant impact on the EEC (refer to Appendix C (MNES Assessment) in **Appendix D**).

The Prescribed Impact Assessment (refer to Appendix C of **Appendix D**) includes a risk assessment with respect to the Mallee Bird Community of the Murray Darling Depression Bioregion EEC, which comprises an assemblage of 20 bird species that rely on mallee habitats.

A total of ten (10) species belonging to this EEC, namely chestnut quail-thrush, crested bellbird, jacky winter, regent parrot, shy heathwren, splendid fairy-wren, spotted pardalote, white-eared honeyeater, white-fronted honeyeater and yellow-plumed honeyeater were recorded in the Project Area during the 2022–2024 surveys. Based on species' flight behaviour and observations from the Project Area, the risk rating for nine (9) of these species was assessed as Negligible. One species, regent parrot (eastern subspecies) (*Polytelis anthopeplus monarchoides*), was assigned an unmitigated risk rating of Moderate, which would be reduced to Minor with mitigation (refer to Appendix B in **Appendix D**).

Bird strike risks to the EEC would be managed under a BBAMP, as outlined in **Section 5.3.1.1** above.

5.3.1.3 General Flora and Fauna Impacts

As a farmer, I am concerned about the impact on the critically endangered Small Purple-pea (Swainsona recta) and the endangered Superb Parrot (Polytelis swainsonii) that inhabit our area. – CS50 (Name Withheld)

The NSW Biodiversity Assessment Method Calculator (BAM-C) and Protected Matters Search Tool (PMST) provide a listed of threatened species which are predicted to occur within the Project Area and therefore require further assessment in the BDAR. While these species may be present within the broader region, neither species are predicted to occur within the Project Area, and have not been identified on site during extensive surveys.

Critical gaps exist in assessing impacts on threatened species, including the Pink Cockatoo (Cacatua leadbeateri) and the Grey-headed Flying Fox (Pteropus poliocephalus). Habitat fragmentation, collision risks, and inadequate restoration plans are severe oversights.- CS102 (Rainforest Reserves Australia)

Impacts to both species have been assessed in accordance with NSW and Commonwealth requirements. The Project would remove 54.34 ha of foraging habitat for the pink cockatoo (*Lophochroa leadbeatri leadbeateri*). Impacts to this species will be offset through ecosystem credits in accordance with the NSW BOS. The species has been assigned an overall moderate risk rating with respect to turbine strike, and impacts will be adaptively managed under a BBAMP. Consequently, the Revised BDAR concludes that the Project is not likely to have a significant impact on the species.

The grey-headed flying-fox (*Pteropus poliocephalus*) was not recorded within the Project Area and has not been identified as likely to occur within the Project Area.

Clearing native vegetation for the project may impact bee and insect populations crucial for local crops. Bat will be greatly affected by these turbine, they will not be able to hear. – CS20 (Name Withheld)

There is currently no requirement, or accepted scientific method, to assess the impacts of wind farms on species (including bees and insects) which are not listed threatened species under the BC Act or EPBC Act. There is also no scientific consensus as to whether wind farms have a significant adverse impact on bee or insect populations. A peer reviewed 2023 study published in Entomalia Generalis (Fourrier, 2023) evaluated the effects of wind turbines on honey bees. No disruptive effect on the behaviour, development or functioning of bee colonies was observed, and while further research is needed, the results of the study (under the experimental conditions) support an absence of impact of wind turbines on honey bee colonies.

Impacts to threatened bats are assessed in the Revised BDAR (**Appendix D**), including the Prescribed Impacts Assessment. A total of 16 bat species were recorded within the Project Area during the 2022-2024 surveys, including four (4) threatened species listed under the BC Act and/or the EPBC Act.

Of the four (4) threatened bat species that were recorded in the Project Area all four (4) were assigned a Moderate risk rating. This includes inland forest bat (*Vespadelus baverstocki*), little pied bat (Chalinolobus picatus), yellow-bellied sheathtail bat (*Saccolaimus flaviventris*) and Corben's long-eared bat (*Nyctophilus corbeni*)

Of the 12 non-threatened bat species, three (3) were assigned a High risk rating, four (4) were assigned a Moderate risk rating and five (5) were assigned a Minor risk rating.

It is noted that the risk ratings identified above are unmitigated, and with the implementation of proposed mitigation measures, these assigned risk ratings are reduced (refer to Appendix B in **Appendix D**).

Bat strike risks would be managed under a BBAMP, as outlined in the Revised BDAR (refer to **Appendix D**).

The trucks using the road for movement are already impacting the wildlife living near to the roads. – CS35 (Peta Cameron)

Vehicle strike risks have been considered in the BDAR (refer to **Appendix D**). Spark Renewables has committed to implement speed limits on newly formed access tracks to reduce the risk of vehicle strikes to fauna specifically in areas surrounding permanent water bodies and close to farm dams, particularly after periods of rain. Speed limits will be specified in the BMP and will be determined having regard to vehicle strike risk levels to fauna across the Project Area, work health and safety considerations and interactions with agricultural operations (refer to B24 in **Appendix C**).

Large wind farms can create localized heat island effects, which can disrupt ecosystems and agriculture. – CS102 (Rainforest Reserves Australia)

Wind turbines do not produce any heat but simply vertically redistribute the heat that is already in the atmosphere. Additionally, there is no scientific evidence of significant localised warming effects being generated by localised land clearing for linear infrastructure of the type and scale proposed.

5.3.1.4 Impacts to Mallee Cliffs National Park

Habitat that will be removed by the Mallee Wind Farm provides:

- *A habitat for the Mallee Fowl;*
- *A feeding area for the Regent Parrot; and*
- *Potential habitat for the numbats, bilbies and greater stick next rats in Mallee Cliffs National Park that are intended to be released outside the protected area of the National Park in the coming years – CS57 (Grand Junction Pty Ltd)*

The Project will result in direct removal of 23.98 ha of foraging habitat for malleefowl (*Leipoa ocellata*). Removal of this habitat has been assessed as unlikely to result in a significant impact to the species, and will be offset through ecosystem credits under the NSW BOS. Turbine strike risks to the species were assigned an overall risk rating of minor (refer to Appendices B and C of the Revised BDAR in **Appendix D**).

The regent parrot forms part of the Mallee Bird Community of the Murray Darling Depression Bioregion EEC. Impacts to the EEC are discussed in **Section 5.3.1.2** above.

Extensive steps have been taken to avoid and minimise impacts to the Mallee Cliffs National Park including:

- establishing a buffer of 800 m to the nearest wind turbine
- maximising siting of infrastructure within cleared areas to minimise loss of habitat connectivity
- committing to a range of measures to minimise incidental or indirect impacts to fauna, including the delineation of clearing limits on site, pre-clearance surveys, weed and pest management and biosecurity protocols, as well as noise and air quality and erosion and sediment management measures.

The impacts predicted and suite of measures adopted to protect the Mallee Cliffs National Park are outlined in detail in **Appendix K** and **Appendix C**.

Mallee Cliffs National Park is being established as a protected area for endangered species under the NSW Government Saving our Species Programme but this is not properly analysed in the EIS. The project threatens the park through:

- broad *scale clearing adjacent to it;*
- *overshadowing and blade flicker within the park;*
- *sound impacts on fauna within the park; and*
- *fire risk. – CS57 (Grand Junction Pty Ltd)*

The Project will impact up to 54.34 ha of native vegetation. This involves limited clearance of small, isolated stands and patches of vegetation separating established cropping paddocks, and these impacts are spread over the length of the Disturbance Footprint. No large patches of native vegetation within the Project Area are proposed to be removed or fragmented. As such, no significant reduction in habitat connectivity in and around the Mallee Cliffs National Park is anticipated.

Shadow flicker generated by the Project is assessed in Section 11 of the LVIA (refer to Appendix 9 of the EIS). As shown in **Figure 5.4**, shadow flicker effects may extend slightly into the Mallee Cliffs National Park, immediately south of the Project Area.

It is noted however that the methodology defined for the shadow flicker assessment (Appendix 9 of the EIS) was based on the very low risk of impacts to human receptors, and as a result incorporates several assumptions that result in a highly conservative assessment. Accordingly, shadow flicker effects, as they extend into the Mallee Cliffs National Park, are somewhat exaggerated, when compared to a realistic or real world situation.

Further, consideration of shadow flicker impacts under both the Visual Bulletin (DPE, 2016) and the Wind Energy Guideline (2024) is concerned with human annoyance, rather than impacts to biodiversity, and as such, these impacts are assessed at residences and other sensitive receivers. As discussed in Section 11.5 of the LVIA, because there is no public access in this area, there are no receivers that would experience potential shadow flicker.

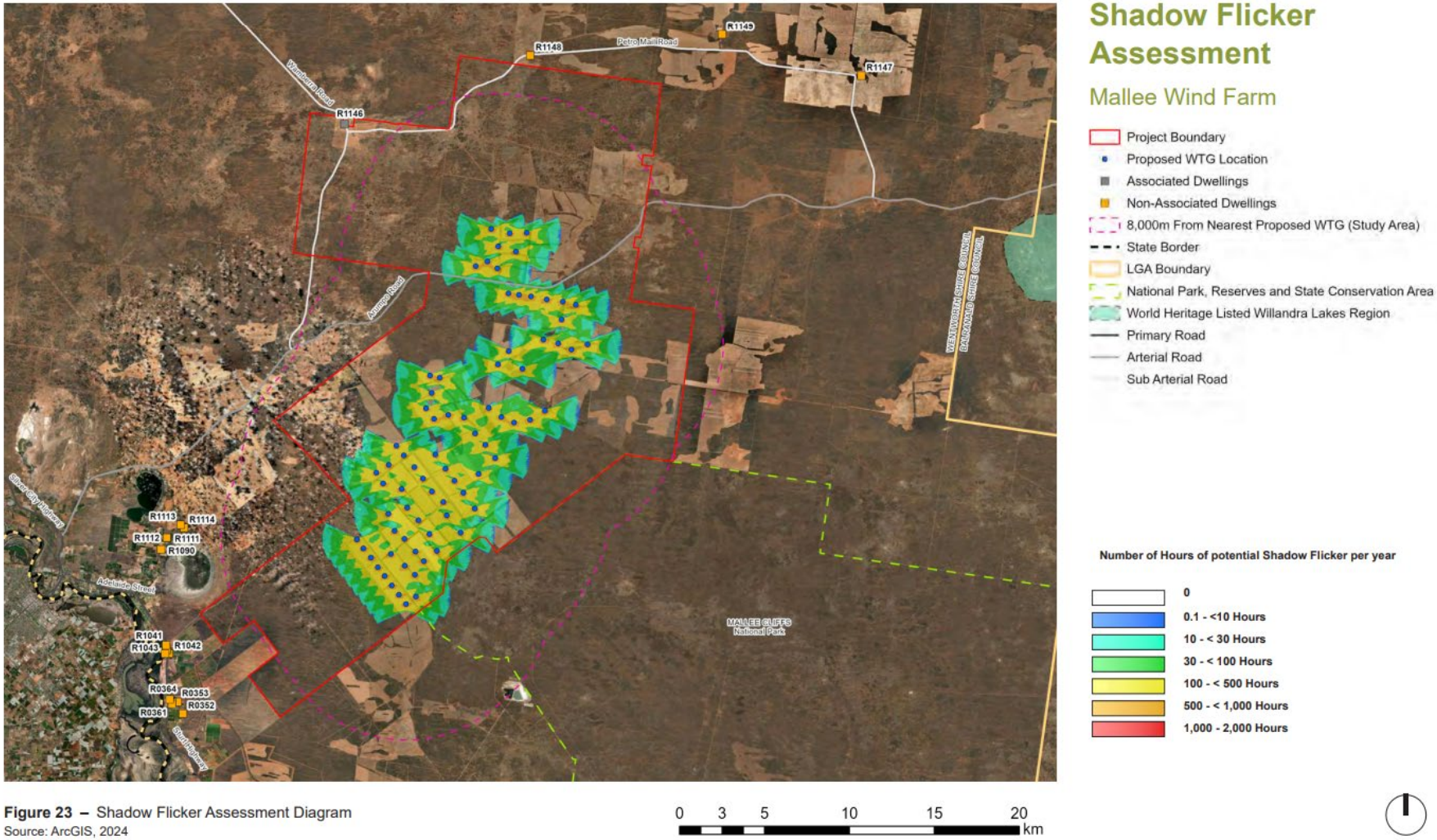

Figure 23 – Shadow Flicker Assessment Diagram
Source: ArcGIS, 2024

Figure 5.4 Shadow Flicker Impacts of the Project

Source: Moir (2024)

Noise impacts to fauna within Mallee Cliffs National Park are discussed in **Section 4.2.14.3**. Bushfire risks and emergency management are discussed in **Section 4.2.14.1** and **Section 5.3.4.**

> *Many private conservation reserves were created as part of the Mallee Sustainable Farming initiative with the intention of improving connection with the National Park. The project undercuts this through impacts on the reserves and the Park. There is inadequate consideration of these Private Conservation Areas in the EIS. – CS57 (Grand Junction Pty Ltd)*

No direct impacts to any private conservation reserves or offset areas are proposed. As discussed above, the Project will impact up to 54.34 ha of native vegetation, consisting of small, isolated stands and patches of vegetation separating established cropping paddocks. No large patches of native vegetation within the Project Area are proposed to be removed or fragmented. As such, no significant reduction in habitat connectivity in and around the Mallee Cliffs National Park is anticipated.

Additionally, it is noted that the current base case option for credit retirement will be the establishment of Biodiversity Stewardship Agreements (BSAs) within the local area. Spark Renewables are currently investigating local land holdings in the region to identify suitable sites for the establishment of BSAs and will look for opportunities to enhance habitat connectivity with National Park Estate and/or other nature reserves where possible to maximise biodiversity outcomes through the Biodiversity Offset Strategy for the Project.

5.3.2 Social and Economic Impacts

A total of 24 submissions raised Project-specific concerns regarding the social and economic impacts of the Project, which are discussed in the sections below.

5.3.2.1 Impacts to Communities and Tourism

> *I object to the proposal on the grounds that its proximity to the Buronga Gol Gol residential area, major tourism routes, and the Mallee Cliffs National Park will have negative impacts on the community, tourism and the environment. – CS114 (Name Withheld)*

The Project has been developed and progressively refined in response to stakeholder feedback. Project refinements have been made in an effort to avoid and minimise negative social impacts associated with the Project, whilst maximising community benefits to the greatest extent practicable.

As discussed in **Section 5.1**, the Project has been assessed as having a low visual impact to the nearby townships of Buronga and Gol Gol, key road corridors and the Mallee Cliffs National Park.

Spark Renewables has also committed to a range of measures to mitigate and manage impacts to the community, consistent with the recommendations of the respective specialist assessment reports including traffic and amenity-related impacts (including cumulative impacts). These measures are documented throughout Section 6.0 of the EIS and in the updated summary of mitigation measures provided in **Appendix C**.

A Preliminary Social Impact Management Framework has been developed to manage residual negative impacts and to maximise positive impacts to affected communities. This framework includes:

- Community Benefit Sharing
- A Community and Stakeholder Engagement Strategy
- Accommodation and Employment Strategy
- Industry and Aboriginal Participation Plan.

5.3.2.2 Impacts to Housing

HOUSING SHORTAGE - There is no excess housing available in BGG and the project has inadequately considered these impacts. – CS104 (Wentworth Capital Pty Ltd)

It is anticipated that approximately 25% of the Project's peak workforce (100 workers) would be based in Mildura, Buronga, Gol Gol and Wentworth, including local residents. To minimise impacts to existing housing supplies within the region, the remaining 75% (300 workers) would be housed at the on-site TWA facility. Conceptual plans for the TWA are provided in **Appendix K**.

5.3.2.3 Impacts to Health Services

HEALTH SERVICES - addition of 400 staff will impact the health services available to Buronga Gol Gol residents. Para 4.4.2 of the Social Impact Assessment devotes only four paragraphs to this fundamental community need and states "such services demonstrate limited capacity to service further population increase". – CS104 (Wentworth Capital Pty Ltd)

The Social Impact Assessment (SIA) presented in Appendix 11 of the EIS included consideration of impacts to health services (see in particular **Section 4.4.2**). The assessment concluded that the incoming workforce are more likely to rely on health service facilities within Mildura, rather than those in Wentworth.

Nevertheless, the SIA recognised that an influx of workers would increase demands on health services, particularly at the general practitioner (GP) level. The SIA estimates that the Project may result in approximately 178 worker visits (for the average workforce) or 317 worker visits (peak workforce) to a GP per year.

To mitigate this impact, a medical centre or first aid room staffed by personnel with suitable first aid/medical training will be provided within the TWA (refer to **Appendix K**). Additionally, Spark Renewables will investigate additional measures to mitigate strain on local health services during detailed Project design, in line with the recommendations of the SIA. These measures may include:

- Having a visiting GP/nurse or medic at the TWA facility
- Provision of telehealth services for workers within the TWA.

These measures are reflected in **Appendix C**.

5.3.3 Visual and Landscape

A total of 14 submissions raised Project-specific concerns regarding the visual and landscape impacts of the Project, which are discussed in the sections below.

5.3.3.1 Impacts to Residences

> *I object to this project. The proposed industrial wind turbines will ruin the beautiful views the local residents and communities have loved for their entire lives. – CS04 Name Withheld*

The Project has been designed and progressively refined to minimise impacts to existing residences and nearby townships. The proposed WTGs are located at least ten (10) km away from the nearest non-associated residence. As such, the LVIA (Appendix 9 of the EIS) concludes that the Project meets the visual magnitude performance objectives at all non-associated residences, as defined by the Wind Energy: Visual Assessment Bulletin (the Visual Bulletin) (DPE, 2016).

5.3.3.2 Impacts to Mallee Cliffs National Park, Townships and Gol Gol Swamp

> *The Mallee Wind Farm will have a dominant visual impact on the Mallee Cliffs National Park, Buronga Gol Gol and surrounding landholders. It will also have a dominate view from the lunette around the Gol Gol Swamp. – CS57 Grand Junction Pty Ltd*

The LVIA concludes that visual impacts within the Mallee Cliffs National Park will be limited, due in part, to the restricted public access within the National Park. The Mallee Cliffs National Park forms part of LCU 05 'National Parks and Conservation Areas' identified in the LVIA. The LVIA indicates that visual impacts to LCU 05 will be low, and that overall, the Project is unlikely to degrade the scenic values of the Mallee Cliffs National Park.

The LVIA concludes that visual impacts to nearby townships of Buronga and Gol Gol as a result of the Project will be low, as existing vegetation and built structures will likely fragment views of the Project, and due to the substantial separation distance, the Project is unlikely to have an impact on the character of the townships.

Gol Gol Swamp forms part of LCU 02 'Creek and River Systems' and is represented as Viewpoint VP11 as identified in the LVIA. The visual impact rating at VP11 is assessed as low. A photomontage from this location (PM05) is reproduced in **Figure 5.5**. The visual impact rating to LCU02 was assessed as low, noting that existing riparian vegetation and minor topographical undulations may fragment views from areas within the LCU. Due to the distance and intervening dense vegetation typical of the LCU, the Project will form a minor element in the overall visual landscape, and the scenic integrity is likely to remain intact. **Figure 5.4**, shadow flicker impacts associated with the Project, are largely confined to the Project Area, with no impacts to neighbouring private properties predicted.

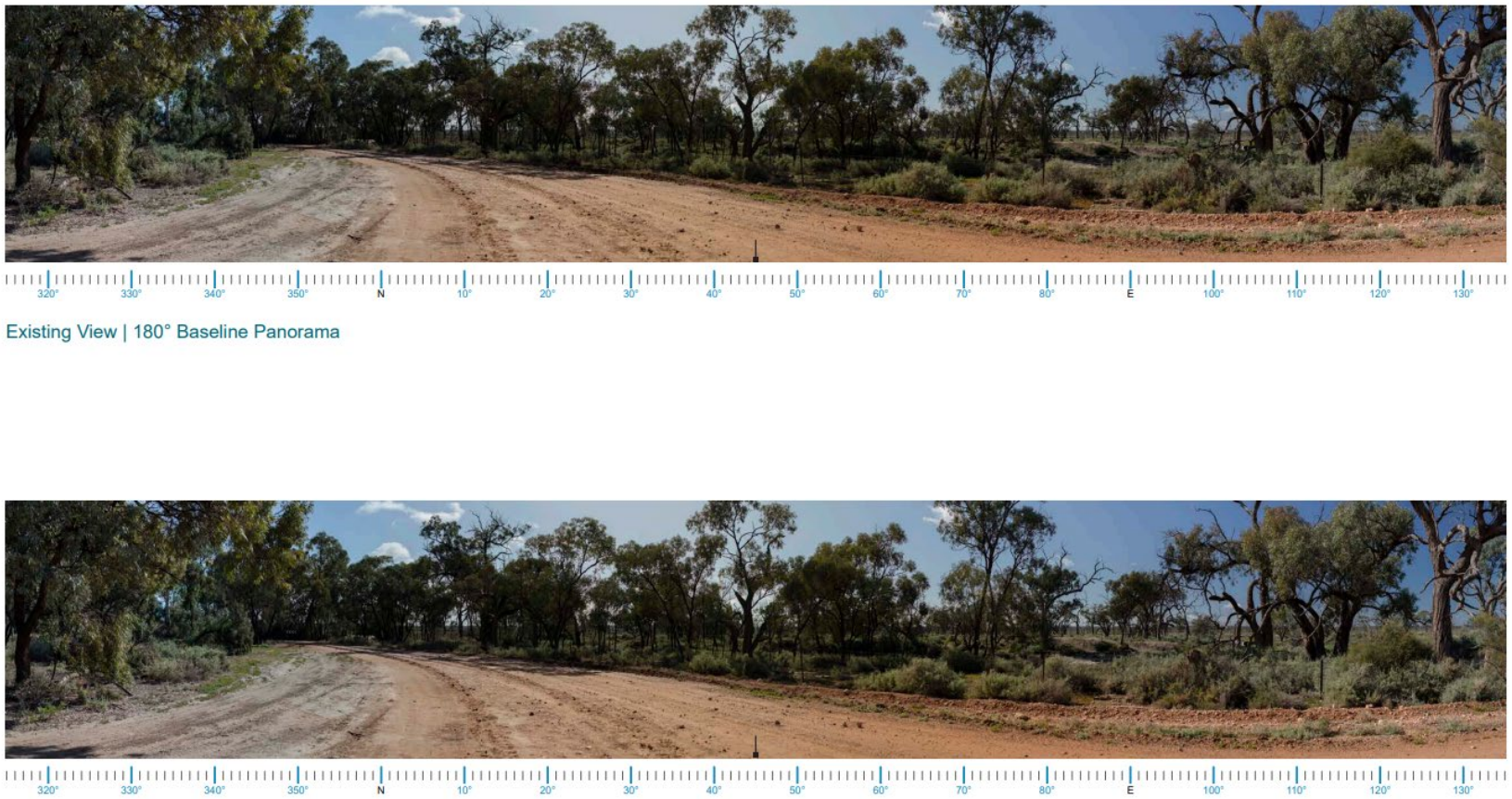

Figure 5.5 Photomontage from Gol Gol Swamp (PM05)

Source: Moir (2024)

5.3.3.3 Shadow Flicker Impacts

Paragraph 6.5.3.5 states that there will be shadow flicker impacts to 11 kilometres of Arumpo Road and the western edge of Mallee Cliffs National Park. There is no analysis of these impacts. There will also be shadow flicker impacts on neighbouring properties. – CS94 UHI Pty Ltd

As shown in **Figure 5.4,** shadow flicker impacts associated with the Project, are largely confined to the Project Area, with no impacts to neighbouring private properties predicted.

However, the LVIA identified that shadow flicker may be experienced along a stretch of Arumpo Road approximately 11 km in length. The shadow flicker for Arumpo Road is projected to be experienced on average between 30 to 100 hr/per year. There is a negligible risk associated with distraction of vehicle drivers who experience shadow flicker, as the experience is not materially different for a vehicle in motion than the effect of shadows from trees on the side of the road.

The potential shadow flicker effects on road corridors align with similar outcomes observed in other approved developments. If required, mitigation measures that may be considered for the affected section of Arumpo Road (in consultation with Council) include warning signs, reduced speed limits and other controlled traffic measures being implemented along the affected portion of Arumpo Road (refer to LV06 in **Appendix C**).

Shadow flicker within Mallee Cliffs National Park is discussed in **Section 5.3.1**.

5.3.4 Bushfire

A total of 11 submissions raised Project-specific concerns regarding the bushfire risk, which are discussed in the sections below.

5.3.4.1 Fire Ignition Risks

Consisting of so much compact electrification, the Mallee Wind Farm and Battery will create an extreme fire hazard to surrounding areas, particularly on a Total Fire Ban Day with the temperature at 43dC and a NW wind blowing at 50 km/hr. Being so tightly packed together it would almost be impossible to contain a fire started within the Mallee Wind Farm and Battery perimeter. The fact that burning Lithium batteries give off a very toxic smoke, fighting the fire would be very dangerous for fire fighters. The surrounding land owners should be very concerned about their welfare. Putting such a highly flammable amount of electric equipment in such a remote area, without any fire fighting, facilities or city mains supply of water is grossly irresponsible and I believe that the NSW Rural Fire Service should oppose the Mallee Wind Farm and Battery being built as it presents an unacceptable fire risk. – CS03 (John Moore)

Under normal operating circumstances, it is extremely unlikely that a wind farm can cause or adversely affect a bush fire. Wind farms are also highly unlikely to start a bushfire by attracting lightning. Should a wind turbine be struck by lightning, built-in control systems divert the voltage safely underground (NSW Government, NSW Climate and Energy Action, 2024).

A Preliminary Hazard Assessment (PHA), which addresses the risk of battery fires, was provided in Appendix 16 of the EIS. The PHA concluded that the risks associated with battery storage within the Project Area are not considered to exceed the acceptable risk criteria under Hazardous Industry Advisory Paper No. 4, 'Risk Criteria for Land Use Safety Planning' (NSW Department of Planning, 2011). Spark Renewables has also committed the following measures to mitigate fire risks associated with battery storage:

- The BESS will be tested in accordance with UL9540A.[9]
- The BESS will be installed in accordance with manufacturer and UL9540A report recommended clearances based on testing.
- A 10 m wide APZ will be established and maintained around the BESS.
- A fire suppression system will be installed for the BESS (as well as the WTGs and substations).
- Establishment of a dedicated water supply for fire fighting.
- Provision of a mobile petrol or diesel or solar powered fire fighting pump (with battery storage backup) and minimum 30 m hose reel which can be used on the back of a 4WD or similar vehicle to fight grassland fires/spot fires, and for pumping water from water tank(s).
- Provision of bushfire training and firefighting equipment for personnel.

These measures are outlined in **Appendix C**.

5.3.4.2 Sufficiency of Fire Fighting Measures

> *The local area where the project is proposed (Category 3 Bush Fire Prone Land) does not have a full time fire service. The mitigation option of having 1 water tanker on the proposed project site is absolutely inadequate. How will that 1 tanker cover and handle a fire? Our community, houses, businesses and flora and fauna will be at a heightened risk as a result of this project and an inadequate proposed mitigation for fire. – CS119 (Name Withheld)*

A dedicated, minimum 100,000 litres of water will be maintained on site for fire fighting purposes, consistent with the recommendations of the Bush Fire Hazard Assessment (Appendix 17 of the EIS). This is considered to be commensurate with the scale and bush fire risk level of the Project.

A range of additional bushfire management commitments are provided in **Appendix C**, including:

- Establishment and maintenance of APZs around the WTGs, substations, switchyards, BESS, TWA and O&M facilities.
- Installation of fire suppression system for the WTGs, substations and BESS.

[9] UL 9540A is an industry-standard test method to meet fire safety and building code requirements for BESS.

- Fire protection equipment within buildings including fire extinguishers, fire hose reels, evacuation signage, first aid kits, etc will be available at all times and serviced /maintained regularly.
- Provision of a mobile petrol or diesel or solar powered fire fighting pump (with battery storage backup) and minimum 30 m hose reel which can be used on the back of a 4WD or similar vehicle to fight grassland fires/spot fires, and for pumping water from water tank(s).
- Provision of bushfire training and firefighting equipment for personnel.
- Development of a detailed BFEMOP in consultation with the RFS and other key stakeholders (refer to **Section 5.3.4.3** below).

5.3.4.3 Bushfire Impacts in Mallee Cliffs National Park

Given the prevailing westerly wind any fires ignited by construction or operation of the Mallee Wind Farm are likely to directly impact Mallee Cliffs National Park. – CS57 Grand Junction Pty Ltd

As discussed above, under normal operating circumstances, it is extremely unlikely that a wind farm can cause or adversely affect a bush fire. Spark Renewables has committed to a range of measures to minimise bushfire risk and to respond to bushfire events. For example, as outlined in **Appendix C** (refer to BF33), the BFEMOP for the Project will detail:

- Actions to prevent bush fire ignition or spread from Project activities.
- Work that will not be conducted during total fire bans.
- Appropriate safety procedures and storage location for any fuels or other hazardous or flammable materials.
- Protocols in place to alert NSW RFS regarding work with the potential to cause a fire to the surrounding vegetation.
- Protocols and triggers to shut down WTGs with an approaching fire.
- Measures relating to the requirements of NSW RFS or other authorities regarding the management risk to aerial firefighting in the region.
- Escalation notifying protocols with contact details for the local NSW RFS Fire Control Centre, local fire brigades, CASA, Air Services Australia, and all other relevant people and / or organisations who will be notified of an emergency at the Project Area.
- The locations of any firefighting water along with alternative water supplies that may be available in the case of an emergency (including any other fire suppression equipment held on and off site).
- Bush fire emergency planning that includes evacuation routes, evacuation triggers and when and where to take refuge.

Additionally, Spark has committed to consult with NPWS and RFS regarding any temporary disruptions or changes to access over the life of the Project (refer to BF01). Subject to the implementation of these measures, the Project is not expected to significantly increase bushfire risks to Mallee Cliffs National Park.

5.3.5 Decommissioning and Waste

A total of 11 submissions raised Project-specific concerns regarding decommissioning and waste generated by the Project.

> *I object to the erection of the Mallee Wind Farm because of the uncertainty that, at the end of the towers serviceable life, the tower blades and concrete bases will be totally removed. – CS30 (Name Withheld)*

As discussed in Section 6.10.4.2 of the EIS, at the end of the Project's 30-year lifespan, three (3) options will be considered:

- Continued use of the Project Area as a wind farm and battery storage utilising the existing WTGs and other facilities (subject to contractual agreement with the host landholders, required planning approvals and condition of equipment).
- Replace the WTGs and BESS with technology current at that time and continue Project operation for a further term (subject to contractual agreement with the host landholders and required planning approvals).
- Decommission the Project and remove the WTGs and other infrastructure.

A Decommissioning and Rehabilitation Strategy (DRS) has been prepared for the Project (refer to Appendix 4 within Appendix 14 of the EIS). The DRS is a high-level strategy which outlines the current methodology that may be used to decommission all infrastructure associated with the Project and rehabilitate the land at the end of the Project's economic life. It provides the basis of a future detailed Decommissioning and Rehabilitation Plan (DRP) which will be developed to address Development Consent conditions for the Project, if approved. The DRP will be developed in consultation with DPHI and key stakeholders, including Council, and Spark Renewables expects a condition in this regard should the Project be approved.

It is also acknowledged that all costs associated with decommissioning and rehabilitation will be borne by Spark Renewables.

Any land disturbed during the construction, operation or decommissioning of the Project will be rehabilitated, except for any parts which have been agreed with the landowners and the relevant authorities to remain in situ including off-site road works.

For the Project, all above- ground structures not required for the ongoing agricultural use of the land or by network service providers, will be removed and the land rehabilitated so that it can return to agricultural use. Internal roads, if not required for ongoing farming purposes or fire access, would be removed. Access gates, if not required for farming purposes, would also be removed. Host landholders will be involved in any discussion regarding the removal or hand-over of infrastructure on their properties.

Below ground infrastructure, including WTG foundations, hardstands and some cabling may be left in situ and covered in clean fill material to a suitable depth, with the land returned to approximate prior condition and use as far as practicable.

It is anticipated that these requirements would be reflected in conditions of consent, should be approval be granted.

General decommissioning and rehabilitation risks are discussed in **Section 5.5.6**.

5.3.6 Water

Nine (9) submissions raised Project-specific concerns regarding water usage and flooding impacts associated with the Project, which are discussed in the sections below.

5.3.6.1 Water Supply

Large amounts of water will be needed for construction, potentially straining local water resources – CS21 (Name Withheld)

Spark Renewables have consulted with Council regarding a future commercial agreement sourcing of water from the Council's mains water supply. Initial discussions indicate that Council has sufficient capacity to supply water to the Project without straining local resources (refer to **Section 3.2.1**).

Water will be conserved and re-used where possible on-site, through:

- Re-use of treated effluent on-site
- Use of water collected in sediment basins
- Installation of rainwater tanks collecting runoff from building roofs
- Where possible, water from the concrete facility and vehicle washdown would be recycled and reused as far as practical.

Other supplementary water sources may be investigated during detailed design, including:

- use from existing dams where harvestable rights apply
- existing groundwater bores under agreement with relevant landholders.

5.3.6.2 Flooding Impacts

Given the area's flat terrain, the project could alter natural water drainage, increasing flood risk for nearby properties. – CS25 (Name Withheld)

A flood assessment was undertaken as part of the WRIA (Appendix 13 of the EIS). The assessment including flooding modelling for a range of flood events. The 10%, 1%, 0.5%, 0.2% Annual Exceedance Probability (AEP) and Probable Maximum Flood (PMF) events were assessed to quantify flood depth, velocity, and hazard levels. Modelling has shown the Project Area to generally be of a low flood hazard with minimal risk of changes in internal or external flows.

Peak stormwater discharges from the Disturbance Footprint for impervious areas may increase slightly through the creation of compacted gravel roads, WTG hardstands and some small operational buildings. However, potential impacts to drainage features and downstream watercourses are considered likely to be minimal due to the relative size of the Disturbance Footprint in relation to the size of the receiving catchments, and the distributed nature of minor impacts. Minimal changes to the land topography, impervious fraction and therefore runoff and groundwater infiltration are expected due to the nature and extent of proposed infrastructure.

Spark Renewables has also committed to undertake further flood modelling during detailed design, consistent with the recommendations of CPHR (refer to **Section 4.2.6.2**).

5.3.7 Noise

Nine (9) submissions raised Project-specific concerns regarding noise generated by the Project.

> *The noise generated by the turbines will be constant and intrusive. This will affect our ability to sleep, work, and enjoy our rural area, leading to increased stress and health problems – CS42 (Name Withheld)*

> *The noise pollution from the turbines will disrupt daily life and could have long-term health effects. It's not just an inconvenience; it's a serious quality of life issue. many companies has breached the noise limits – CS44 (Name Withheld)*

As discussed in Appendix 10 of the EIS, due to the substantial separation distance between the proposed WTGs and the nearest non-associated dwellings (in excess of ten (10) km), operational noise is predicted to remain below the relevant noise criterion of 35 dBA $_{LAeq\ 10min}$ under the NSW Noise Assessment Bulletin (Noise Bulletin) (DPE, 2016).

Additionally, any purported non-compliances with noise limits at unrelated wind farm operations are irrelevant to the merit assessment of the Project under the EP&A Act.

Effects on human health are discussed further in **Section 5.3.9**.

5.3.8 Traffic

Nine (9) submissions raised Project-specific concerns regarding traffic generated by the Project, noting in particular, the condition of local roads. These matters are discussed in the sections below.

5.3.8.1 Traffic congestion and Condition of Public Roads

> *The small community roads we travel on will see an increase of traffic to the roads we use that are already in poor condition. – CS35 (Peta Cameron)*

The Revised Traffic and Transport Impact Assessment (TTIA) (Appendix B of the Amendment Report) includes a road link capacity assessment, which identifies the expected increase in daily traffic volumes on the external road network during all key phases of the Project, and considers the level of impact the forecast increase in traffic is anticipated to have on the operation of the identified road links.

While small numbers of Project traffic may utilise other roads in the vicinity of the Project Area, the assessment is generally focussed on the relevant sections of the Sturt Highway, Silver City Highway and Arumpo Road which form the Local Transport Route for the additional traffic anticipated to be generated by the Project.

The addition of the expected peak construction traffic is shown to lead to minor increases in daily traffic volumes on the relevant sections of the Sturt Highway and the Silver City Highway, with higher increases (28–91%) calculated for the daily traffic volumes on Arumpo Road.

Notwithstanding this, the Revised TTIA indicates that the total volumes on the relevant sections of the identified roads would remain within their generally accepted capacities. As such, the Revised TTIA concludes that the relevant sections of the Sturt Highway, the Silver City Highway and Arumpo Road will provide adequate capacity to cater for the additional traffic volumes generated by the Project, subject to the proposed road upgrades being undertaken.

Should the Project be approved, it is anticipated that conditions of consent would require road dilapidation surveys to assess the condition of affected roads prior to and following construction, any infrastructure upgrades, and decommissioning, and that Spark Renewables would be required to repair or make good any damage caused by Project-related traffic.

5.3.8.2 Impacts to Chaffey Bridge

I am concerned about the additional road traffic when the Chaffey Bridge is already congested. – CS81 (Name Withheld)

The Project includes a range of safeguards to minimise traffic congestion on the Chaffey Bridge, which crosses the Murray River between Mildura and Buronga. Specifically:

- No OSOM transport is proposed via the Chaffey Bridge.
- The majority of the Project's workforce (75% or 300 workers during peak construction) would reside in the on-site TWA, avoiding the need to commute daily to site from Mildura.
- The majority (90%) of workers residing in the TWA are expected to travel to the TWA by minibus. Minibus pick up and drop off locations within the nearby townships would be confirmed during detailed design, but will be selected to maximise connectivity to key transport links (e.g. Mildura airport and train station).
- The remaining 10% of workers making their own way into the TWA by private vehicle will be instructed to travel into and out of the TWA outside of AM and PM peak periods, including any ad-hoc trips to nearby towns (refer to TWA02 in **Appendix C**).
- At this stage, Spark Renewables has identified four (4) potential quarry locations where quarried materials could be sourced for Project construction (refer to **Section 4.2.13.2**). Of these, only one (1) quarry (Mallee Earthmoving & Excavations) is located on the southern side of the Murray River and would require quarry trucks to travel via Chaffey Bridge. Additionally, these truck movements are expected to be spread through the day, rather than concentrated during peak AM and PM periods. These traffic movements would be managed under a CTMP, prepared in consultation with key agencies.

5.3.8.3 Use of Dansons Road

It is stated in the Rex J Andrews Transport Study that the Project can potentially utilize Danson's Road as an alternate access road when the Proponent knows this is a private road and that the Project has specifically been denied access to it. – CS58 (Grand Junction Pty Ltd)

No use of Dansons Road is proposed. This is clarified in the Revised TTIA provided within the Amendment Report (Umwelt, 2026).

5.3.9 Human Health

Seven (7) submissions raised Project-specific concerns regarding the impacts of the Project on human health, which are discussed in the sections below.

5.3.9.1 General Health Risks

As a parent, I worry about the long-term health implications for my children. The constant exposure to noise and potential pollutants , BPA & PFAS from the turbines could have lasting effects on their development and well-being – CS38 (Name Withheld)

There is no evidence to support the suggestion that wind farms are harmful to humans. This position is informed by the scientific findings of the National Health and Medical Research Council (NHMRC) and the advice of NSW Health (NSW Climate and Energy Action).

In relation to noise, the Australian Medical Association has advised that infrasound and low frequency sound generated by wind farms are well below the level that is harmful to humans. General contamination risks associated with wind farms are discussed further in **Section 5.5.5**.

The NSW Government has committed to monitor contemporary scientific research outcomes to ensure its position reflects robust evidence of any health effects, including any advice released from the National Wind Farm Commissioner and the Independent Scientific Committee on Wind Turbines.

5.3.9.2 Electric and Magnetic Fields (EMF)

The installation of the Turbines will bring high voltage transmission lines close to our community. Not only is this a visual blight on our landscape, but it also poses significant health risks due to prolonged exposure to electromagnetic fields – CS53 (April Borchard)

An assessment of EMF was provided within the Preliminary Hazard Assessment (Appendix 16 of the EIS) in compliance with International Commission on Non-Ionizing Radiation Protection (ICNIRP) Guidelines for limiting exposure to Time-varying Electric, Magnetic and Electromagnetic Fields.

As the closest residence is over 5 km away from any Project infrastructure which may generate EMF, the potential for the EMF to exceed the accepted levels is considered negligible.

5.3.9.3 Contamination

Please provide a comprehensive list of all molecular compounds/chemical elements contained in the Wind Turbines & BESS - including all of the components which make up the blades & any coatings used - so this can be reviewed & confirmed by independent scientists. That is, the atoms and molecules involved in all components. – CS66 (Name Withheld)

This is not a requirement of the SEARs and would not be practicable, particularly given that a specific WTG and BESS model will not be selected until detailed design is undertaken. However, Spark Renewables will abide by all applicable NSW and Commonwealth legislation, standards and guidelines regarding the composition of the WTG and BESS during detailed design, and as infrastructure is replaced and/or upgrades from time to time over the life of the Project. General contamination risks associated with wind farms are discussed further in **Section 5.5.5**.

5.3.10 Agriculture

Six (6) submissions raised Project-specific concerns regarding the Project's impacts on agriculture, which are discussed in the sections below.

5.3.10.1 Loss of Agricultural Productivity

The Mallee Wind Farm and Battery is going to permanently pollute in some way 57,330 hectares of Australian agricultural land. It should be considered a crime to permanently pollute agricultural land, as the fact is that Agricultural Land is annually able to rejuvenate itself and continue to produce food and fibre, is a miracle, and it should be kept as one of the most priceless, uses of land in Australia. If it is fertilized and nurtured it will continue to annually rejuvenate itself, and produce agricultural produce, for the period from 2025 to 2125, a period of one hundred years and then indefinitely. – CS03 John Moore

Wind farms are compatible with farming, grazing and they provide an alternative income stream that is not rainfall dependent (NSW Government, NSW Climate and Energy Action, 2024). Impacts to agriculture are addressed in Section 6.10 and Appendix 14 of the EIS. The EIS concluded that impacts to agriculture as a result of the Project are likely to be generally minimal, temporary, and limited to the Disturbance Footprint. These impacts can be summarised as follows:

- The Project would result in the temporary removal of up to 444.69 ha of land within the Project Area from agricultural land use for the duration of the Project which represents approximately 3% of land used for cropping within the Project Area, and approximately 1% of the overall agricultural land use areas of the Project Area.
- The temporary removal of potential agricultural primary productivity to the estimated value of up to $154,415 per year for the duration of the Project.

- The Project will have negligible impact on the viability of local and regional agricultural services and employment. There will be negligible impacts experienced by employees or contracting services currently engaged (i.e., stock mustering services).
- There will be no impact to critical mass thresholds of agricultural enterprises needed to attract and maintain investment in agricultural industries and infrastructure.

5.3.10.2 Soil Compaction

The installation process could compact soil, reduce fertility, and impact local cropping fields.- CS28 (Name Withheld)

Section 6.10 of the EIS acknowledges that temporary impacts on soil resources may occur within the Disturbance Footprint, however no direct or indirect impacts to soil resources of the Project locality outside the Project Area (other than very minor areas of disturbance required for off-site road works). Any land disturbed during the construction, operation or decommissioning of the Project will be rehabilitated under a detailed DRP, except for any parts which have been agreed with the landowners and the relevant network service providers to remain in situ including off-site road works. As detailed in Section 6.10 of the EIS, areas which have been compacted by heavy machinery during decommissioning will be restored through ripping and topsoil replenishment and graded to mimic the slope and contour of the natural landscape. To facilitate plant growth, all revegetated areas will be fertilized during seeding and maintained until sufficient coverage is achieved.

At the time of decommissioning, disturbed land will be returned to an equivalent land and soil capability (LSC) class following the end of life for the Project, through site rehabilitation and good soil management practices. This is reflected in the commitments in **Appendix C** (refer to SLA07).

5.3.11 Cumulative Impacts

Four (4) submissions raised Project-specific concerns regarding the cumulative impacts of renewable energy developments within the South West REZ, and the Wentworth LGA in particular.

There are three other major wind farms and two major solar farms planned nearby to Mallee Cliffs. They will dominate the local vistas and overwhelm local service provision in health, housing and roads. – CS90 (Agexpo Pty Ltd)

The EIS provides a comprehensive assessment of cumulative impacts, with the key findings summarised in Section 6.15 of the EIS. All environmental and social matters were considered with respect to potential cumulative impacts within the respective specialist assessment, with Appendix 23 of the EIS presenting a scoping summary of the key matters.

No cumulative visual impacts are anticipated with developments within 10 km of the Project including Euston Mineral Sands, Project EnergyConnect (NSW - Eastern Section), Gol Gol Solar Farm, Mallee Solar Farm, Gol Gol Wind Farm and Gol Gol Battery Energy Storage System as there are no dwellings within 8 km of any WTG.

With respect to health, housing and roads, these impacts are addressed in **Section 5.3.2** and **Section 5.3.8**.

5.3.12 Heritage

Two (2) submissions raised Project-specific concerns regarding heritage impacts.

> *The proponent has identified 21 Aboriginal cultural heritage sites including one Potential Archaeological Deposit and aims to address these through refinement of design and a vague "will develop and implement a comprehensive Aboriginal Cultural Heritage Management Plan (ACHMP) in consultation with Registered Aboriginal Parties (RAPs)". Such a plan should be robustly examined BEFORE the project is approved otherwise, this is no more than words on paper with no consequences - and is insufficient to protect our aboriginal heritage. – CS96 (CWOREZist)*

A detailed ACHMP for SSD is routinely prepared post determination, noting that management strategies may require adjustment after detailed design is undertaken. Should the Project be approved, it is anticipated that an ACHMP will be required to be prepared in consultation with RAPs before construction can commence. Spark Renewables also expects that the ACHMP will not be approved by the Planning Secretary until appropriate consultation occur, consistent with Aboriginal Cultural Heritage Consultation Requirements for Proponents (Department of Environment, Climate Change and Water, 2010).

5.3.13 Air Quality and Greenhouse Gas

Two (2) submissions raised Project-specific concerns regarding air quality and greenhouse gas emissions, which are discussed in the sections below.

5.3.13.1 Dust Impacts

> *Dust from construction could affect air quality and crop health. – CS22 (Name Withheld)*

An Air Quality Impact Assessment was undertaken in support of the EIS (refer to Appendix 15). This assessment indicates that during construction, dust impacts would generally be localised within the Project Area and are unlikely to extend more than 250 m beyond the Project Boundary. Additionally, dust generated by construction would be of a temporary nature, and would be managed under a range of proposed mitigation measures, including the use of water carts, as detailed in **Appendix C**. On this basis, no adverse impacts to regional air quality, or crop health, are anticipated as a result of the Project.

5.3.13.2 Whole of Life Greenhouse Gas Emissions

> *The Department must consider the whole-of-life emissions of the project, as the proponent has failed to do so. This calculation would include raw materials mining, transport, manufacture, installation, decommissioning, any recycling emissions and the multiple replacements needed …, not just the operating emissions. The Department should demand these calculations from the proponent and make them public. – CS12 (National Rational Energy Network Inc.)*

It is acknowledged that the manufacturing and construction of wind farms will produce emissions, however when fully operational wind farms generate energy with virtually no emissions (NSW Government, NSW Climate and Energy Action, 2024). A quantitative assessment of greenhouse gas emissions generated over the Project lifecycle has not been undertaken as this is not required by the Project SEARs. However, the NSW Government has noted that a study has shown that the 'carbon payback period' for a 2 MW turbine, with a working life of 20 years, is between five (5) and eight (8) months (Haapala, 2014).

Additionally, submissions raised concerns that the release of stored carbon due to land clearing should be adequately accounted for. While the Project will directly impact up to 54.34 ha of native vegetation within the Disturbance Footprint, any stored carbon emissions associated with land clearing would be minor and occur as a single event during construction, while emissions reductions generated by the wind farm would continue over the 30-year operational life of the Project.

On this basis, it is considered that the greenhouse gas emissions generated during the lifecycle of the Project will be quickly outweighed by the corresponding reduction in greenhouse gas emissions once the development is operational.

5.3.14 Aviation

A submission from CWO REZist Inc. (CS96) included a range of comments regarding aviation safety, with key extracts and Spark Renewables' responses provided in the sections below.

5.3.14.1 Assessment of Wake Turbulence

> *The proponent's aviation consultant, Aviation Projects, has recently implemented a reduced consideration in all wind projects they have been contracted for, for wake/turbulence from turbines to be only 10 rotor diameters. There is a lack of recent real-world studies in regard to wake and turbulence on aircraft from large turbines and the studies the proponent is basing their estimates on, are heavily weighted for wake/turbulence on other turbines only, not, for example, light aircraft, with an exception of a 2018 study quoted which was for dramatically smaller turbines and rotor diameters which do not apply to the current size of the WTGs being utilised now. The published standard calculation in Australia is for 16 rotor diameters (see https://www.infrastructure.gov.au/sites/default/files/documents/4.1.3_Guideline_D_Wind_Turbines.pdf " Consideration also needs to be given to the 16 rotor diameters in the CIRCUIT area, not just the landing area. Whilst there are no airfields or circuit areas within the standard 16 rotor diameters and therefore unlikely to impact aviation, DPHI should not accept the proponent's consultant's repetitive wish to alter the standards. – CS96 (CWO REZist Inc.)*

As the submission notes, it is immaterial for the purposes of the Project, whether a 16 or 10 rotor diameter is applied in the assessment of wake turbulence impacts. The Updated AIA (**Appendix F**) concludes that there is no wake turbulence impact from the WTGs on any uncertified aerodromes in the vicinity, irrespective of which distance is applied. Nevertheless, additional discussion and justification for the approach to the assessment of wake turbulence is provided in Section 8 of the Updated AIA.

The Aviation report, whilst it considers VFR flight in stress of weather conditions when low flying is permitted, also states "In VMC, the WTGs will likely be sufficiently conspicuous to allow adequate time for pilots to avoid the obstacles". Is LIKELY safe? No it is not. The poor weather case is when most terrain collision accidents occur. This risk assessment is deceptive and negligent. The off-white colour of the turbines will not contrast with rain, cloud or smoke especially in low-light conditions. Obstacle lighting and high-visibility markings would be of benefit in these conditions and should be a requirement if the project is approved. - CS96 (CWO REZist Inc.)

Spark Renewables has committed to provide obstacle lighting to the WTGs. Further information is provided in **Section 4.2.2** and **Appendix G**, along with commitments regarding high-visibility markings.

5.3.14.2 Aerial Firefighting

The proponent has stated "Most aerial firefighting organisations have formal risk management programs to assess the risks associated with their operations and implement applicable treatments to ensure an acceptable level of safety can be maintained." However, stating that routine aviation risk management strategies are used does not address the fundamental problem. Routine risk management will dictate that Large Air Tankers, and probably Small Air Tankers as well, stay clear of turbine areas when visibility is obscured by smoke. Aerial firefighting will be restricted in and adjacent to the project area. In smoke and with turbulence, air tankers will have to stay outside of, or well above turbine areas, thus making them ineffective.

The report also states "The Australasian Fire and Emergency Services Council (AFAC) has developed a national position on wind farms", this position is based on an outdated and not fit for purpose case study in the light of the current size of WTGs and the cumulative impact from multiple projects in a concentrated area.

Following the lodgement of the EIS, DPHI has formalised its position in the Wind Energy Guideline (2024). Whilst not directly applicable to the Project, it is instructive in resolving any previous ambiguity in NSW policy. Section 5.3.2 of the Wind Energy Guideline provides that *'Wind turbines do not pose a significant risk to firefighting activities and are no different to structures such as communications towers and overhead powerlines. Aerial firefighting can be undertaken around wind turbines if appropriate strategies, emergency management systems and communications protocols are in place. Applicants must detail the operational procedures they will implement in a bushfire in the project's emergency plan. This should include measures such as shutting down turbines and positioning blades in a manner to minimise interference with aerial firefighting operations.'*

Additionally, the Wind Energy Guideline provides:

> *If turbines and other tall structures are equipped with aviation obstacle lighting, the applicant must ensure there are procedures in place to quickly activate the lights during a bushfire or fog event to increase the visibility of these obstacles to pilots. The applicant must also consult with the Rural Fire Service to develop any other appropriate procedures to minimise impacts to firefighting efforts and to communicate the final turbine coordinates and heights.*

Spark Renewables has committed to implement all of these measures, consistent with the Guidelines, as reflected in **Appendix C** (see for example, AV11 and B35).

5.3.14.3 Trentham Aerodrome

> *The Aviation report identifies an uncertified aerodrome (Trentham Cliffs) within 3nm of the project area, but does not detail any contact was made with this stakeholder (the owner and operator of this aerodrome). We request DPHI to ensure that the owner/operator of this aerodrome be consulted and their views detailed and considered before any assessment for this project is undertaken.- CS96 (CWO REZist Inc.)*

Impacts to Trentham Cliffs aerodrome are discussed in Section 7 of the Updated AIA (**Appendix C**).Trentham Cliffs aerodrome is an uncertified aerodrome located approximately 1.7 nautical miles (nm) or 3.1 km west of the southwestern Project Boundary. As the nearest proposed WTG would be located approximately 6.8 nm or 12.6 km from aerodrome, flight operations would not be impacted by the Project. On this basis, consultation is not required.

5.4 Justification and Evaluation of the Project

This section addresses public submissions relating to the justification and evaluation of the Project as a whole. Consistent with the Submissions Report Guidelines, justification and evaluation related issues may include the consistency of a project with Government plans, policies or guidelines. Five (5) public submissions (4%) raised matters relating to the justification and evaluation of the Project, which have been grouped into two (2) issues as outlined in the sections below.

5.4.1 Strategic Planning Considerations

Five (5) submissions raised concerns regarding the need for strategic planning of renewable energy development within the Wentworth LGA:

> *Multiple wind farms are proposed for Wentworth District without any coordination. Assessments of Cumulative Impacts on noise, views, services and community are simplistic. NSW Planning requires a strategic approach before they allow urban development, and the same principle should apply here. There should be a freeze in all wind farm development in Wentworth until such a strategy has been completed. – CS57 (Grand Junction Pty Ltd)*

Strategic planning at the LGA scale is a matter for Government, rather than individual applicants, however, it is noted that:

- The EIS provides a comprehensive assessment of cumulative impacts of the Project, in combination with other renewable energy projects proposed in the region, with a summary of key findings presented in Section 6.2.6 of the EIS. This would be enhanced through the development of further detailed strategies (e.g. an Accommodation and Employment Strategy) post-determination.
- There is no statutory justification for delaying the assessment of the Project to enable the development of a regional strategy, particularly when strategic and cumulative impact considerations of the Project have been addressed in line with the requirements of the EP&A Act and SSD Guidelines.

5.4.2 Capacity of South West REZ

Two (2) submissions raised concerns regarding the total capacity of the South West REZ, noting that total generation of current proposed and approved projects exceeds this capacity:

> *The SWREZ has an approved network capacity of 2.5 GW, this project is ~400 MW installed capacity – what amount of overbuild/total installed capacity is expected in this REZ to be able to export 2.5 GW? Pottinger is 0.75GW, The Plains 0.4 GW, Bullawah 1GW, Baldon 1.4GW and Wilan 0.8GW. For perspective the whole of NSW consumes 8-11 GW at any time, yet in the SWREZ we so far have 5.75GW planned install alone! – CS12 National Rational Energy Network*

As noted in Section 6.2.6 of the EIS, the final composition of renewable energy development in the South West REZ will largely be determined by the NSW Government allocation of access rights to the limited transmission infrastructure. The EIS acknowledged that the intended capacity of the South West REZ is 2.5 gigawatts with registered interest well in excess of this, and the EIS likely overstates cumulative impacts within the REZ as not all projects will proceed at the maximum capacity proposed.

Following a competitive access rights tender process, on Friday 12 April 2024 the NSW Minister for Energy announced that four (4) renewable energy and storage projects have been granted access rights in the South West REZ, with a total allocated capacity of 3.56 GW. The Project was not awarded access rights as part of that announcement; however, Spark Renewables intends to progress the assessment of the Project on the basis that:

- Additional transmission capacity may become available in the future, if the awarded Projects do not proceed, or if the capacity of the REZ is later expanded.
- The EIS has already considered the project connecting to the existing 220 kV transmission system that is not subject to the access rights tender process for the South West REZ.
- Certainty regarding grid connection is not required for the consent authority to complete a merit assessment of the Project, noting that a multitude of REZ-based projects have been granted approval across NSW while their respective access rights were yet to be confirmed.

5.5 Issues Beyond Scope

This section addresses public submissions raising issues beyond the scope of the Project. Consistent with the Submissions Report Guidelines, this includes issues that are beyond the scope of the Project (e.g. broader policy issues) or not relevant to the Project.

60 public submissions (50%) raised issues which were considered beyond the scope of the Project. These issues do not relate to the merits of the Project specifically but raise broader concerns relating to the merits of renewable energy and wind farm development generally.

The Project involves the development of a wind farm within South West NSW, which is consistent with Commonwealth renewable energy commitments under the international climate change agreement (The Paris Agreement), as well as the NSW Climate Change Policy Framework, NSW Electricity Strategy and NSW Electricity Infrastructure Roadmap. Broader concerns raised in the submissions regarding the merits of these commitments and policy frameworks are ultimately a matter for Federal and State Governments. Nevertheless, key themes beyond the scope of the Project which were raised in public submissions are discussed below.

5.5.1 Suitability & Reliability of Renewable Energy

A total of 25 submissions expressed concern regarding the reliability of wind energy to meet the needs of the NEM.

> *This inferior, damaging plan will cause inadequate Grid Reliability - breaking down the stability of the electricity grid, leaving Australians without an Essential Electricity Service that we are paying for to be available on demand.*

> *There will disgracefully be BLACKOUTS & unreliable power during critical times, such as during extreme weather events or high demand. – CS75 (Name Withheld)*

> *Wind turbines are not 'ecologically sustainable'. Consideration needs to be given to mining for metal and materials, manufacturing, shipping and transport, clearing of land, blasting, underground cabling, cement, high voltage transmission infrastructure, maintenance, decommissioning and recycling. If this is done honestly, it is apparent that industrial turbines are far from "sustainable". – CS96 (CWO REZist Inc.)*

The Project Area has been selected based to the reliability of the wind resource (refer to Figure 2.1 of the EIS).

Large-scale wind energy developments such as the Project are just one part of the NSW Government's Electricity Strategy (DPIE, 2019) which 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 response and generation technologies.

The Electricity Strategy acknowledges that wind and solar technologies generate electricity at low cost and without emissions, however, the ability of these technologies to dispatch electricity is dependent on the weather and time of day. The NSW Electricity Strategy states that renewables are now the most economic form of new electricity generation, with a mix of wind and solar firmed with gas, batteries and pumped hydro expected to be the most economic form of reliable electricity for the State (Graham et al, 2018).

In combination, these different forms of energy generation and storage will provide sufficient dispatchable capacity to meet NSW peak demand to replace ageing coal-fired power stations and reduce greenhouse gas emissions.

5.5.2 Negative Impacts to Rural & Regional Communities

A total of 20 submissions raised concerns regarding the potential for cumulative social and economic impacts to communities associated with development in the South West region generally.

> *These projects are destroying the spirit of rural communities through division. – CS13 (Name Withheld)*

> *I oppose this project as it is just one of many that will cumulatively destroy our country life-style and country environment, which will be devastating for decades, including for tourists. – CS116 (Name Withheld)*

A detailed assessment of the cumulative environmental, social and economic impacts of the Project was provided in the EIS (refer to Appendix 11). This assessment has concluded that while there will be environmental and social impacts associated with the Project (including cumulative impacts), the extent of impact has been minimised through the design process and where impacts are predicted, Spark Renewables has committed to management, mitigation and offset measures to address these residual impacts (refer to **Appendix C**).

Overall, it is considered that the Project will provide substantial long-term, strategic benefits to South West NSW, both at the regional and local levels. These strategic benefits are summarised in **Section 5.5.8**.

> *Impact on Property Values: Properties near wind farms often experience value declines due to aesthetic and environmental concerns.- CS102 (Rainforest Reserves Australia)*

Property devaluation is not a relevant planning consideration under the EP&A Act where the proposed use is permissible under applicable planning controls. However, the outcomes of the various specialist studies undertaken in support of the EIS and this Submissions Report demonstrate that there will not be a significant adverse impact to residences or townships surrounding the Project Area.

To the contrary, the Project is predicted to make a significant contribution to the regional economy. An Economic Impact Assessment (EIA) was prepared for the project by Ethos Urban Pty Ltd (Ethos Urban 2024). The total Estimated Development Cost (EDC) of the Project is estimated to be approximately $850 million. Major investment costs are associated with the purchase of wind turbines and towers, with significant investment also required for civil, electrical and grid connection works.

Additional investment will be required relating to project management, planning and approvals, financing, insurance and other project costs. Of the total investment for the Project approximately $130 million is estimated to be retained in the locality.

5.5.3 Political Commentary

A total of 20 submissions expressed scepticism regarding the NSW Government's planned transition to renewable energy generation and expressed support for continued reliance on coal and gas fired power, or the use of nuclear power. A minority of submissions also expressed scepticism regarding the existence of anthropogenic climate change.

> *When the powers that be realise that we are living in the Nuclear age & wish to remain an advanced country, most of what is planned for NSW will become obsolete.*
>
> *PUT THE COAL BACK IN THE COALITION & ADD A NUCLEAR POWER FUTURE! – CS75 (Name Withheld)*
>
> *It is ridiculous that Australia is currently not effectively using its abundant coal, gas and uranium resources to provide an affordable, sustainable and reliable energy generation network for its citizens and businesses.*
>
> *In conclusion, the Federal Government needs to legislate to remove the prohibition on nuclear energy, which is required to meet Australia's national security needs and not rely on supply chains that use forced labour and are becoming more tenuous. – CS98 (Name Withheld)*

It is beyond the scope of this Project to justify that anthropogenic climate change is occurring. The Project is aligned with the NSW Government's commitment to the renewable energy transition and the government's response to climate change risk. Additionally, it is noted that nuclear power does not currently form part of the proposed energy mix for NSW, according to the NSW Government's Electricity Strategy.

5.5.4 Biodiversity Impacts

A total of 18 submissions raised concerns regarding biodiversity impacts associated with wind farm development generally. These general concerns are beyond the scope of the Project. However, Project-specific biodiversity impacts are addressed in **Section 5.3.1**. Additional assessment of biodiversity impacts has also been provided in the Revised BDAR (**Appendix D**).

5.5.5 Contamination Risks

A total of 14 submissions raised concerns regarding perceived contamination risks associated with wind farm development, with a particular focus on the use of Bisphenol A (BPA) in wind turbine components.

There are also contamination issues to be considered that can longer be ignored. Contamination of waterways, soil profiles and waste management arising from wind turbine blades containing high levels of BPA is recognized worldwide as a ticking time-bomb. As the leading edges of the blades erode, a fine dust of BPA (an endocrine disrupter acknowledged by WHO) is shed into the air. This toxic chemical group is slowly but surely working its way up the food chain and finishing up on our dinner tables. – CS107, Ian McDonald

The leading edge of a WTG refers to the part of the turbine blade that first contacts the air. The leading edge of a WTG can be subjected to erosion over time as a result of environmental factors.

The NSW Government's position is that wind turbine electricity does not involve the production of pollutants, emissions or waste which can have significant effects on our health and well-being (NSW Government, NSW Climate and Energy Action, 2024).

BPA is a common industrial chemical that has been used to make certain plastics and resins since the 1950s and is still used in containers that store food and beverages, such as water bottles and other consumer goods.

In July 2021, a small group from Norway (The Turbine Group) (TTG) released a self-published report that claimed that wind turbine blades shed dangerous amounts of microplastics and BPA. This report has not been peer-reviewed or published in any academic journals. The report has led to stories in local and international media outlets, resulting in increased concern among residents who are seeking information on living near wind turbines.

In March 2023, American Clean Power (ACP) published a fact sheet to correct what it identified as misinformation. The fact sheet states that wind turbine blades contain only microscopic traces of residual BPA and therefore do not account for large, or any, emissions of BPA or microplastics to the environment.

Further, (ACP, 2023) states that once the BPA-based epoxy glue used in manufacturing of turbine blades is hardened in the factory prior to delivery to a project site, the blades only contain microscopic traces of residual BPA. It identified that if released to a natural environment, the trace amounts of BPA would rapidly undergo biodegradation and thereby be removed. The extremely low potential for BPA emissions from wind turbine blades does not pose a risk to the environment or people, and is much lower compared to what the US Food and Drug Administration has approved for human exposure from commonly used food and beverage packaging (ACP, 2023).

5.5.6 Scepticism Regarding Economic Benefits

A total of 12 submissions raised concerns regarding the economic benefits of renewable energy projects generally.

This unreliable destructive project will not benefit anyone except the proponent. This project will be another nail in the coffin for our economic prosperity and living standards. This unreliable unrecyclable project will add to our cost of living and our poverty while it pours cement into a natural landscape. – CS67 (Name Withheld)

The Project is expected to result in substantial direct and indirect benefits to the local community and wider region, as summarised in **Section 5.5.8**.

> *It is part of a system that costs billions, does not work reliably and attempts to solve a problem that does not exist, in other words useless and irresponsible use of public funds;- CS69 (Name Withheld)*

With respect to submissions regarding government subsidies for renewable energy, the project is expected to be privately financed.

> *The TOTAL cost has not been verified by independent experts; - CS69 (Name Withheld)*

Consistent with the Project SEARs, a detailed calculation of the EDC of the development was prepared by an AIQS Certified Quantity Surveyor or RICS Chartered Quantity Surveyor in accordance with Planning Circular PS 21-020: Calculation of Capital Investment Value and submitted during lodgement of the EIS.

5.5.7 Decommissioning & Rehabilitation Risks

A total of 11 submissions raised concerns regarding decommissioning and rehabilitation of renewable energy developments generally.

> *The life expectancy of a turbine is 20 to 30 years. Who will be responsible for the decommissioning of them? The blades are made from fibreglass and carbon and are normally used as landfill, this alone is a great environmental issue. The decommissioning of underground cables also contributes to an environmental impact, but they also contribute to carbon emissions and compromise the site stability, erosion or unwanted pathways for surface water particularly in flood prone areas. – CS115 (Name Withheld)*

Spark Renewables has committed to decommissioning and rehabilitation at the cessation of the operating life of the Project and recognises the costs and process required to deliver on this commitment. Spark Renewables expects that the requirement to decommission the Project will be addressed by the conditions of consent should the Project approved and welcomes such an outcome. A DRS has been prepared for the Project (refer to Appendix 4 within Appendix 14 of the EIS).

The DRS is a high-level strategy which outlines the current methodology that may be used to decommission all infrastructure associated with the Project and rehabilitate the land at the end of the Project's economic life. It provides the basis of a future detailed DRP which will be developed to address Development Consent conditions for the Project, if approved. The DRP will be developed in consultation with DPHI and key stakeholders, including Council, and Spark Renewables expects a condition in this regard should the Project be approved.

As discussed in **Section 5.3.5**, to avoid unnecessary ground disturbance, below ground infrastructure, including WTG foundations, hardstands and some cabling may be left in situ and covered in clean fill material to a suitable depth, with the land returned to approximate prior condition and use as far as practicable.

Where will the damaged blades be dumped? – CS67 (Name Withheld)

As discussed in Section 6.14.3.2 of the EIS, after dismantling of the WTGs, components will be either sold and transported to another site for reuse or metal components may be sold to the scrap metal market. The methods for re-using or recycling WTG components, particularly turbine blades, is based on current technology. There is an emerging WTG refurbishment industry internationally, however as most Australian wind farms are still within their operational life the industry is still developing in Australia. As wind farms are decommissioned across Australia in the decades ahead there will be a growth in providers tendering to procure, transport and sell wind farm components and scrap material for future uses, and this growth will be reflected in future development and reviews of the DRP.

After the assets are removed, most of the materials will be reclaimed or recycled, given the significant value of the steel, copper, aluminium and other materials. It is important to note that the recycling of WTGs is a rapidly emerging industry with innovation occurring across the world to develop commercial recycling of WTG components at the end of its life. Spark Renewables has committed to the adoption of best practice to reuse, recycle and dispose of turbine components at the time of decommissioning.

5.5.8 Human Health & Safety Impacts

Nine (9) submissions raised concerns regarding human health and safety impacts associated with wind farm development generally. These general concerns are beyond the scope of the Project. However, Project-specific health impacts are addressed in **Section 5.5.5.**

Additionally, one (1) submission in support of the Project provided general commentary in support of wind farm development:

Multiple scientific studies show wind farms don't harm our health. The safety of wind farms is supported by the main agency for health and medical research in Australia, the National Health and Medical Research Council (NHMRC). – CS120, Doctors for the Environment Australia

5.5.9 Agricultural Impacts

Eight (8) submissions raised concerns regarding agricultural impacts associated with wind farm development generally. These general concerns are beyond the scope of the Project. However, Project-specific impacts to agriculture are addressed in **Section 5.3.1**.

5.5.10 Bushfire Risks

Seven (7) submissions raised general concerns regarding bushfire risk and aerial fire fighting. These general concerns are beyond the scope of the Project. However, Project-specific related bushfire and aerial firefighting considerations are addressed in **Section 5.3.4** and **Section 5.3.14.**

5.5.11 Land & Water Impacts

Five (5) submissions raised concerns regarding land and water impacts associated with wind farm development generally. These concerns related primarily to water supply and erosion risks. Project-specific related water supply and erosion issues are addressed in **Section 4.2.7.2** and **Section 5.2.2.3**, respectively.

6.0 Updated Project Justification

This section provides an updated justification for the Project, taking into consideration the Project's environmental, social and economic impacts and the suitability of the site, to assist the consent authority to determine whether or not the Project is in the public interest.

6.1 Environmental, Social and Economic Impacts

The Project has been designed and progressively refined:

- in response to key environmental constraints and landholder and community feedback
- with consideration of all feasible alternatives
- to minimise environmental impacts and maximise social and economic benefits to local communities.

Further detail regarding this iterative design process is provided in Section 2.7.4 and Section 5.0 of the EIS.

A comprehensive assessment of the environmental, social and economic impacts of the Project has been undertaken as part of the EIS, and this has been updated, where relevant, by the Amendment Report (Umwelt 2026) and this Submissions Report. This comprehensive assessment has considered:

- site characteristics, as well as the existing environmental and social contexts
- expert technical assessment
- the outcomes of focused consultation with relevant government agencies
- the outcomes of extensive engagement with the local community and other key stakeholders
- the principles of ecologically sustainable development, including the precautionary principle, inter-generational equity and conservation of biological diversity and ecological integrity.

The key issues identified were subject to detailed specialist assessment to identify the potential impacts of the Project on the existing environment. These assessments are detailed in Section 6.0 of the EIS and supporting appendices, along with updated technical studies appended to the Amendment Report (Umwelt, 2026) and this Submissions Report.

Overall, the assessment has concluded that while there will be environmental, social and economic impacts associated with the Project, the extent of impact has been avoided or minimised through the design process and where impacts are predicted, Spark Renewables has committed to updated management, mitigation and offset measures to address these residual impacts (refer to **Appendix C**).

The detailed impact assessment undertaken concludes that with the implementation of feasible and reasonable mitigation measures, the Project can proceed within acceptable environmental, social and economic standards.

6.1.1 Summary of Key Environmental, Social and Economic Matters

As noted above and detailed in Section 2.7.4 of the EIS, the Project was refined to avoid and minimise adverse environmental, social and economic impacts. This process included consideration of all relevant matters assessed in the EIS but provided a focus on key issues such as biodiversity, social impacts and Aboriginal Cultural heritage where the greatest need, and potential, for adjustments to the Project existed. These matters and any additional considerations, regarding the scale and nature of impacts, costs and benefits are outlined below.

- **Biodiversity –**
    - The Project would directly impact up to 54.34 ha of native vegetation within the Disturbance Footprint.
    - The Project would directly impact approximately 22.76 ha of Mallee Bird Community of the Murray Darling Depression Bioregion, an endangered ecological community (EEC) listed under the EPBC Act.
    - There are no direct impacts to threatened species-credit species or their habitats.
    - No WTGs are located within the recommended buffer to large intact patches of woody vegetation (Rodrigues et al (2015)) within the Mallee Cliffs National Park, which is in the order of 300 m. The closest WTG is located approximately 800 m from the boundary of the National Park, exceeding the recommended buffer by at least 500 m.
    - Prescribed impacts are considered within the Revised BDAR including Raptor species, connectivity for threatened fauna species and turbine strike risks for threatened species and other specific fauna. Some impacts relating to bird and bat strike and barotrauma from turbine operation are uncertain and therefore a BBAMP will be implemented to measure and response to any impacts. Species that will be monitored through operation of the Project with potential high (unmitigated) risk of impact include black falcon (*Falco subniger*), little eagle (*Hieraaetus morphnoides*) and white-striped freetail-bat (*Austronomus australis*).
    - Spark Renewables is committed to implementing the mitigation and management measures identified in **Appendix C** and will ensure that biodiversity values are continued to be considered (and impacts offset where required) during the detailed design process.
- **Aboriginal Cultural Heritage –**
    - A detailed ACHA was undertaken in consultation with RAPs and having regard to relevant statutory requirements and guidelines. This included desktop investigations and extensive field survey.
    - Spark Renewables has avoided 24 Aboriginal Sites through Project design refinement including both an open site and a potential archaeological deposit (PAD) being avoided.
    - The Project will directly impact eight (8) Aboriginal sites located within the Disturbance Footprint comprising four (4) hearths and four (4) isolated artefacts all of which were assessed as having low overall significance.
    - Spark Renewables has committed to implement a community collection program for the four (4) isolated artefacts to preserve these objects and as an alternative to complete destruction. No specific mitigation is proposed in relation to the four (4) hearth sites which are in extremely poor condition and cannot be archaeologically investigated.

- Spark Renewables is committed to implementing the mitigation and management measures identified and will ensure that Aboriginal Cultural heritage values are continued to be considered during the detailed design process.

- **Historical Heritage –** the Project will result in changes to the landscape within the vicinity of the Project. However, the risk of visual or physical impacts to listed heritage items located in the vicinity of the Project has been assessed as negligible. Spark Renewables will implement the targeted mitigation and management measures identified in **Appendix C** and ensure these matters are considered during the detailed design process.
- **Visual (Amenity) –**
  - The Project will result in changes to the landscape, however, impacts to non-associated residences are limited, and are generally 'low' or 'negligible'. There are no non-associated, associated or host dwellings within 8,000 m of any WTG.
  - The Mallee Cliffs National Park is located immediately south-east of the Project Area approximately 800 m from the nearest WTG. The national park is noted to have restricted public access and as a result, it is unlikely the Project would degrade the scenic value of this landscape feature thus resulting in limited visual impact.
  - The Willandra Lakes Region World Heritage Area is located approximately 25 km east of the nearest WTG. It is unlikely that the Project will have a visual impact on the Willandra Lakes Region World Heritage Area due to the distance from the Project. If appropriate design principles are incorporated into the night lighting for ancillary infrastructure it is likely there will be no visual impacts resulting from night lighting of ancillary structures.
  - Shadow flicker was assessed and determined that no dwellings will experience shadow flicker hours however there is potential for motorists along Arumpo Road to experience shadow flicker. There is a negligible risk associated with distraction of vehicle drivers who experience shadow flicker. Although shadow flicker has the potential to cause annoyance to commuters, there is a negligible risk associated with distraction of vehicle drivers who experience shadow flicker, as this is not dissimilar to the effect of shadows from trees on the side of the road or high passing vehicles. The risk of blade glint was considered to be very low as a result of low reflectivity surface treatment for WTGs.
  - Spark Renewables will implement the targeted mitigation and management measures identified in **Appendix C** and ensure these matters are considered during the detailed design process.
- **Noise (amenity) –**
  - There are no non-associated, associated or host dwellings within 10 km of any WTG however seven (7) receivers are located within 12 km of a WTG. The predicted noise levels at various receivers are detailed below:
    - Predicted WTG noise levels are below the reference level of 45 dB $L_{Aeq\ 10min}$ at the host receiver and below the Noise Bulletin base noise limit of 35 dBA $L_{Aeq\ 10min}$ at all non-associated receivers.
    - Noise emissions from ancillary infrastructure are predicted to be well below the most stringent night-time noise level of 35 dB $L_{Aeq,\ 15\ min.}$

- Construction noise is not predicted to exceed either the noise affected or highly noise affected management levels at any dwellings during any of the assessed construction tasks.
- Road traffic noise is anticipated to result in a noticeable increase in noise during some periods given the already low existing traffic volumes.

- WTG noise levels are predicted to be in the order of 40 dB L_{Aeq} at the boundary of Mallee Cliffs National Park noting this is approximately 800 m from a WTG at its closest point. This is well below the recommended amenity noise level of 50 dB L_{Aeq}.
- Noise mitigation in the form of consultation and communication during these periods is recommended in Section 6.6.4 of the EIS as the most effective means of minimising impacts.

- **Transport –**
  - The operation, construction and decommissioning phases of the Project are expected to generate only a minor impact on the surrounding road network in the peak periods.
  - Minor road network upgrades are proposed at the following locations as part of the Project to maximise the safety and operational performance of the external road network:
    - Sturt Highway roundabout at intersection of Carey Street, Euston
    - Sturt Highway roundabout onto Silver City Highway, Buronga
    - Silver City Highway onto Arumpo Road.

    These proposed upgrades are assessed in further detail in the Amendment Report (Umwelt, 2026).
  - Suitable site access intersection configurations would need to be provided to accommodate OSOM heavy vehicle movements, which would meet the minimum sight distance required to comply with Austroads requirements.
  - Spark Renewables will implement the targeted mitigation and management measures identified in **Appendix C** and ensure these matters are considered during the detailed design process.
- **Water Resources –**
  - Construction water demand is conservatively estimated to be up to 229 ML over the duration of the construction period reducing to up to 2 (ML) per year during operations and will be met by commercial water supply sources including Wentworth Shire Council. A more likely (50th percentile) estimate of water demand is 140 ML during construction and less than 1 ML per year during operations.
  - During construction up to 15 waterway crossings (minor streams and drainage features) may need to be established to facilitate access throughout the Disturbance Footprint. Where required, these will be designed and constructed in accordance with relevant guidelines and in consultation with DPI Fisheries. As such, these crossings (if required) are not expected to result in any measurable impacts to stream health including water quality and fish passage.
  - Spark Renewables will implement the targeted mitigation and management measures identified in **Appendix C** and ensure these matters are considered during the detailed design process.

- **Soil, Land and Agriculture –**
    - A soil survey found the Project Area to contain two (2) dominant soil mapping units and three (3) land and soil capability (LSC) classes comprising Class 4 (moderate capability), Class 6 (low capability) and Class 7 (very low capability).
    - There is no mapped Biophysical Strategic Agricultural Land (BSAL) or State Significant Agricultural Land (SSAL) within the Project Area.
    - The Project would temporarily remove up to 444.69 ha of land within the Project Area from agricultural land use for the duration of the Project.
    - Spark Renewables will implement the targeted mitigation and management measures identified in **Appendix C** and ensure these matters are considered during the detailed design process.
- **Air Quality –**
    - Air quality impacts would be primarily limited to the construction phase, and to a lesser extent, the decommissioning phase of the Project.
    - During construction and decommissioning, impacts would generally be localised within the Project Area and are unlikely to extend more than 250 m beyond the Project Boundary.
    - The host dwelling (R1146) is located within 250 m of the Project Boundary however it is noted that it is in excess of 10 km to the nearest WTG and the Disturbance Footprint.
    - A range of dust mitigation measures are proposed to manage potential dust impacts during all phases of the Project, consistent with best industry practice.
    - Spark Renewables will implement the targeted mitigation and management measures identified in **Appendix C** and ensure these matters are considered during the detailed design process.
- **Hazards and Risks** – A Preliminary Hazard Assessment was undertaken to identify a range of hazards that have the potential to result in an incident with offsite impacts. No incidents were identified as resulting in offsite impacts and it is concluded that the risks at the Project Boundary are not considered to exceed the acceptable risk criteria under Hazardous Industry Advisory Paper No. 4, 'Risk Criteria for Land Use Safety Planning (DPIE, 2011). Spark Renewables will implement the targeted mitigation and management measures identified in and ensure these matters are considered during the detailed design process.
- **Bushfire** – The Project Area has been identified as being Category 3 Bush Fire Prone Land by the NSW RFS Bush Fire Prone Land mapping. Spark Renewables has committed to a range of bush fire mitigation and management strategies including the establishment of Asset Protection Zones (APZs) and a static water supply on site and establishing emergency procedures including shutdown to enable safe aerial firefighting. Spark Renewables will implement the targeted mitigation and management measures identified in **Appendix C** and ensure these matters are considered during the detailed design process.
- **Blade throw risk, EMI and EMF** – Assessments presented in the EIS have concluded that the Project meets relevant assessment criteria. Spark Renewables will implement the targeted mitigation and management measures identified in **Appendix C** and ensure these matters are considered during the detailed design process.

- **Aviation safety** –
    - There are two (2) certified airports located within 30 nm (56 km) of the Project: Mildura Airport (YMIA) and Wentworth Aerodrome (YWTO). The Project would require the Minimum Sector Altitude (MSA) and Procedures for Air Navigation Services – Aircraft Operations (PANS-OPS) to be increased. Both Grid lowest safe altitude (LSALTs) and four (4) air routes would also need to be raised. Following consultation with the operator of Wentworth Aerodrome, no objections were raised. Consultation with Mildura Airport remains ongoing and will be finalised prior to construction commencing. Commitments to formalise changes to airport procedures prior to commencing construction of any WTGs or WMTs are provided in **Appendix C**.
    - Spark Renewables will implement a range of aviation safety measures as detailed in **Appendix C**, including standard notification procedures and the provision of obstacle lighting on WTGs and meteorological masts[10] as shown conceptually in **Appendix G**.
- **Waste –**
    - The Project will implement a waste hierarchy (in order of priority) of avoidance, resource recovery and disposal. While many wastes generated by the Project can be avoided, recycled or reused, some wastes will need to be disposed of to landfill, and in this case Spark Renewables will liaise with the relevant local authorities to manage waste accordingly.
    - A DRS has been developed for the Project (refer to Appendix 14 of the EIS). A more detailed DRP would also be developed in consultation with key stakeholders post approval.
    - Spark Renewables will implement the targeted mitigation and management measures identified in **Appendix C** and ensure these matters are considered during the detailed design process.
- **Social –**
    - Extensive community and stakeholder engagement was undertaken for the Project, with the perceived positive and negative impacts associated with the Project identified and assessed within the SIA (Appendix 11 of the EIS).
    - The majority of residual social impact rankings for identified perceived impacts were low with two (2) moderate negative social impact rankings and three (3) high positive social impact rankings.
    - Spark Renewables has committed to implement a Social Impact Management Framework comprising:
        - Accommodation and Employment Strategy
        - Community Benefit Strategy
        - Industry and Aboriginal Participation Plan
        - Community and Stakeholder Engagement Plan.
    - Spark Renewables will implement the targeted mitigation and management measures identified in **Appendix C** and ensure these matters are considered during the detailed design process.

[10] Meteorological masts are also described as Wind Monitoring Towers (WMTs) in **Appendix F** and **Appendix G**.

- **Economic –**
    - The Project is expected to generate an accommodation need greater than the current accommodation capacity of the locality. Spark Renewables has therefore proposed an on-site TWA facility to accommodate the 75% of the Project's peak construction workforce (300 workers).
    - The Project would result in a temporary loss of 444.69 ha of agricultural land over the 30-year life of the Project with an economic impact to agricultural primary productivity equating to $154,415 per year for the duration of the Project.
    - Of the total investment for the Project approximately $130 million is estimated to be retained in the locality and the Project will support 225 direct and 360 indirect jobs over the construction period.
    - Ongoing economic stimulus associated with the operation of the Project is estimated at approximately $220 million over 30 years (CPI adjusted) relating to land holder leasing payments, operational wage stimulus, and community payments.
    - Spark Renewables will implement the targeted mitigation and management measures identified in **Appendix C** and ensure these matters are considered during the detailed design process.
- **Cumulative Impacts –**
    - There are ten (10) renewable energy, infrastructure and other major projects within approximately 75 km of the Project. Of the ten (10), two (2) are approved and eight (8) are proposed.[11]
    - Key potential cumulative impacts identified include biodiversity, Aboriginal cultural heritage, amenity issues (noise and visual), traffic impacts and social and economic impacts. Spark Renewables is committed to implementing mitigation and management measures to minimise potential cumulative impacts associated with the Project.
    - Spark Renewables will implement the targeted mitigation and management measures identified in **Appendix C** and ensure these matters are considered during the detailed design process.

6.2 Suitability of the Project Area

As outlined in Section 2.7.3 of the EIS, the Project Area was selected based on a range of factors, including:

- its strategic position within the South West region of the NSW and access to approved transmission infrastructure
- the reliability of the wind resource
- the heavily disturbed nature of much of the Project Area, which enables all WTGs and key infrastructure to be located within previously cleared cropping land, thereby minimising impacts to biodiversity and cultural heritage values

[11] As at the date of the preparation of the EIS.

- the absence of any non-associated dwellings within 10 km of proposed WTGs, meaning that the Project's visual and noise impacts are likely to be some of the lowest of any wind farm proposed in NSW
- landholder support for co-existence of agriculture and renewable energy and interest in entering into Host agreements.

The Project design has been developed and refined in response to key site constraints. This has included maintaining a 500 m buffer from vegetation and an 800 m buffer Mallee Cliffs National Park to minimise biodiversity and visual impacts (refer to **Appendix K**).

In addition, a range of specific principles were adopted, as detailed in Section 2.7.4 of the EIS. These principles include:

- Prioritising avoidance and minimisation of impacts to significant biodiversity values.
- Minimising the Project's Disturbance Footprint and maximising use of previously cleared land.
- Aligning the Disturbance Footprint with the boundary of existing agricultural operations to minimise the impact on ongoing operations in consultation with landholders.
- Avoiding impacts to areas of high archaeological sensitivity and identified Aboriginal sites.
- Minimising interactions with the Euston Mineral Sands Project through the careful placement of proposed Project infrastructure.
- Commitment to an on-site TWA facility to reduce housing and accommodation pressures on the surrounding localities.

Based on the assessment findings outlined in Section 6.0 of the EIS, and subject to the implementation of the management, mitigation and offset measures proposed to address residual impacts (refer to **Appendix C**), the site is considered suitable for the carrying out of the proposed Project.

6.3 Ecologically Sustainable Development

An objective of the EP&A Act is to encourage ecologically sustainable development (ESD) within NSW. This section provides an assessment of the Project in relation to the principles of ESD.

To justify the Project with regard to the principles of ESD, the benefits of the Project in an environmental, social and economic context should outweigh any negative impacts. The principles of ESD encompass the following:

- the precautionary principle
- inter-generational equity
- conservation of biological diversity
- valuation and pricing of resources.

Essentially, ESD requires that current and future generations should live in an environment that is of the same or improved quality than the one that is inherited.

6.3.1 The Precautionary Principle

Clause 193(2) of the EP&A Regulation provides:

> *The precautionary principle is that if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation.*

In applying the precautionary principle, Clause 193(2) provides that public and private decisions should be guided by:

- careful evaluation to avoid, wherever practicable, serious or irreversible damage to the environment, and
- an assessment of the risk-weighted consequences of various options.

In order to achieve a level of scientific certainty in relation to the potential impacts associated with the Project, an extensive evaluation of all the key components of the Project has been undertaken. Detailed assessment of all key issues and necessary management procedures have been conducted and are comprehensively documented in the EIS and this Submissions Report.

The EIS provides a detailed analysis of the existing environment (refer to Section 2.6 and Section 6.0), and the use of desktop analysis, site-specific survey and monitoring and scientific modelling (where relevant) to assess and determine potential impacts as a result of the Project.

The decision-making process for the design/refinement, impact assessment and development of management and mitigation measures has been transparent in the following respects:

- Key community, Aboriginal representatives and Government stakeholders have been consulted during preparation of the EIS and Submissions Report. Stakeholder feedback has informed impact avoidance, the Project refinement process and the development of proposed impact mitigation and management strategies. Further details regarding key stakeholder feedback and how this feedback has been addressed are provided in Section 5.0 of the EIS and in **Section 3.0** and **Section 5.0** of this Submissions Report.
- The EIS has been undertaken on the basis of the best available scientific information about the Project Area and has been informed by site-specific survey, monitoring, modelling and impact assessment.

Due to the nature of the Project, specific details will be subject to the detailed design phase and will be influenced by the technology applicable at the time. Any uncertainty in the data used for the assessment has been appropriately identified, and appropriate assumptions have been applied to represent a conservative worst-case analysis to assess a range of potential impact scenarios. Extensive management and mitigation measures will be implemented, including monitoring programs to measure predicted against actual impacts of the Project (refer to **Appendix C**).

Spark Renewables will prepare and implement a CEMP, OEMP and DRP, which will implement best practice management and will incorporate all identified mitigation and management measures identified in **Appendix C**. Additionally, the Project will be subject to an independent auditing and verification process consistent with relevant requirements for SSD projects.

Spark Renewables will report on monitoring outcomes and compliance with the development consent, should the Project be approved. It is expected any development consent would include non-compliance notification procedures. Spark Renewables will make the following information publicly available on its website as relevant to the stage of the Project:

- a comprehensive summary of the monitoring results, which will be reported in accordance with the various plans and programs approved under a development consent
- the annual Statement of Compliance with an EPL
- any independent environmental audit.

6.3.2 Intergenerational Equity

Clause 193(4) of the EP&A Regulation provides:

> *The principle of inter-generational equity is that the present generation should ensure the health, diversity and productivity of the environment are maintained or enhanced for the benefit of future generations.*

The principle of intergenerational equity seeks to ensure that the needs and requirements of today's generations do not compromise the needs and requirements of future generations in terms of health, biodiversity and productivity.

The Project is located within a defined area planned for renewable energy development by the NSW Government. The Project is consistent with the objectives of the NSW Electricity Strategy and NSW Electricity Infrastructure Roadmap (NSW Government, 2020), in aiming to provide large-scale renewable electricity generation that is affordable and reliable. With a proposed capacity of up to 402 MW, the Project will support the State's transition away from fossil fuel reliance.

Additionally, Spark Renewables has committed to develop a detailed DRP for the Project, building on the strategies and general principles outlined in the DRS (refer to Appendix 4 of Appendix 14 of the EIS). Through the development and implementation of the DRP, disturbed land will be returned to an equivalent LSC class following the end of life for the Project.

The assessment findings outlined in Section 6.0 of the EIS indicate that while there will be environmental, social and economic impacts associated with the Project, the extent and severity of adverse impacts have been minimised through the design process and where impacts are predicted, Spark Renewables has committed to management, mitigation and offset measures to address these residual impacts (refer to **Appendix C**).

6.3.3 Conservation and Biological Diversity

Clause 193(5) of the EP&A Regulation identifies that the principle of conservation of biological diversity and ecological integrity should be a fundamental consideration in the decision-making process. The conservation of biological diversity refers to the maintenance of species richness, ecosystem diversity and health and the links and processes between them. All environmental components, ecosystems and habitat values potentially affected by the Project are described and measures to ameliorate any negative impacts are outlined in **Appendix C**.

The Project has been designed to maximise use of previously cleared cropping land, and to provide a substantial buffer between WTGs and the adjacent Mallee Cliffs National Park, thereby minimising impacts to identified biodiversity to the greatest extent practicable.

Following the application of avoidance and mitigation measures, the BAM assessment has identified the biodiversity credit requirement to offset the residual impacts of the Project and the required management and mitigation measures to be implemented, including a Bird and Bat Adaptive Management Plan (BBAMP) which will provide for the ongoing adaptive management of impacts on key species. It is noted that the biodiversity credit requirements are very low for a renewable energy project of this scale, which is reflective of the significant effort which has been invested in careful site selection, avoidance and design refinement.

On this basis, the principle of Conservation of Biological Diversity is considered to be satisfied.

6.3.4 Valuation, Pricing and Incentive Mechanisms

The goal of improved valuation of natural capital has been included in Agenda 21 of Australia's Intergovernmental Agreement on the Environment.

The principle has been defined in Clause 193(6) of the EP&A Regulation as *'the principle of improved valuation, pricing and incentive mechanisms is that environmental factors should be included in the valuation of assets and services, such as—*

- *polluter pays, that is, those who generate pollution and waste should bear the cost of containment, avoidance or abatement, and*
- *the users of goods and services should pay prices based on the full life cycle of the costs of providing the goods and services, including the use of natural resources and assets and the ultimate disposal of waste, and*
- *established environmental goals should be pursued in the most cost-effective way by establishing incentive structures, including market mechanisms, that enable those best placed to maximise benefits or minimise costs to develop their own solutions and responses to environmental problems.'*

The Project has been designed to avoid and minimise adverse environmental, social and economic impacts as much as practicable. For example, the proposed Disturbance Footprint has been designed to avoid areas of native vegetation and known Aboriginal cultural heritage sites, where practicable.

Project considerations have included the costs of management measures to minimise adverse environmental, social and economic impacts. There will also be additional costs associated with implementation of the Project's Biodiversity Offset Strategy (refer to **Appendix D**).

The Project will provide cleaner reliable electricity generation, assisting with meeting current load demand while reducing greenhouse gas emissions and the impacts of climate change.

6.4 Conclusion

The Project directly supports both Commonwealth and NSW renewable energy and decarbonisation objectives:

- At the federal level, the Australian Government has committed to reducing greenhouse gas emissions by 43% below 2005 levels by 2030 and achieving net zero emissions by 2050, underpinned by a target of 82% renewable electricity by 2030 (Cth DCCEEW, 2025).
- In parallel, NSW has set its own legislated targets of net zero emissions by 2050 and a 70% reduction below 2005 emissions by 2035, alongside Renewable Energy Zone and firmed renewables deployment goals (NSW Climate Energy Action, 2026). The project will deliver 402 MW of new wind capacity by 2030 and will contribute materially to replacing retiring coal-fired generation in the NEM, increasing the share of low-cost, zero-emissions electricity needed to meet both state and federal targets while supporting energy security and affordability for NSW consumers.

The Project has been designed and progressively refined in consultation with key stakeholders to:

- Maximise the use of previously disturbed cropping land, thereby avoiding and minimising impacts to biodiversity and cultural heritage values whilst also facilitating co-existence of renewable energy and agriculture.
- Maximise potential benefits to impacted communities.

The assessment findings outlined in Section 6.0 of the EIS (and as updated by the Amendment Report (Umwelt, 2026) and this Submissions Report) indicate that while there will be environmental, social and economic impacts associated with the Project, the extent of impact has been avoided and minimised through the design process and where impacts are predicted, Spark Renewables has committed to management, mitigation and offset measures to address these residual impacts.

The Project will provide long-term, strategic benefits to the State of NSW, including:

- Renewable energy supply to assist with fulfilling the current obligations under NSW and Commonwealth renewable energy targets.
- Providing for cleaner reliable electricity generation, assisting with meeting current load demand while reducing greenhouse gas emissions and the impacts of climate change.
- Providing regional investment in the NSW renewable energy sector.

The Project will also provide direct financial benefits to the region and local community, including:

- The Project will require approximately $866 million in investment during the construction phase, of which approximately $130 million will be retained in the Wentworth Shire LGA and the Mildura Rural City LGA.
- Ongoing economic stimulus associated with the operation of the Project is estimated at approximately $220 million over 30 years (CPI adjusted) relating to land holder leasing payments, operational wage stimulus, and community payments.
- Supporting 225 direct and 360 indirect FTE positions in the national economy (on average) over the construction period, with 400 direct FTE during peak construction.

- Supporting an estimated 30 direct and 85 indirect FTE jobs nationally during operations. Indirect benefits to local services through the construction and operation phases.
- Supporting 95 FTE construction jobs and 47 FTE ongoing operational jobs (includes both direct and indirect jobs within the Wentworth Shire LGA and the Mildura Rural City LGA.
- Injection of approximately $4.6 million in new spending into the Wentworth Shire LGA and the Mildura Rural City LGA over the construction phase with flow on benefits for local businesses.
- Payments to host landowners via negotiated agreements, resulting in financial contributions to the local community.
- Annual payments to the community under a Planning Agreement with Wentworth Shire Council and a community benefit sharing scheme.

On this basis, and subject to the implementation of the mitigation, management and offsetting commitments outlined in **Appendix C**, it is considered that the Project is consistent with the objects and requirements of the EP&A Act and is in the public interest.

7.0 References

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Appendix A

Submissions Register

A.1 State and Commonwealth Government Authorities

Name	Submitter ID	Where are the issues addressed?
APA	-	**Section 4.2.1**
CASA	-	**Section 4.2.2**
Department of Defence	-	**Section 4.2.3**
Fire and Rescue NSW	-	**Section 4.2.4**
Heritage NSW	-	**Section 4.2.5**
NSW DCCEEW - CPHR	-	**Section 4.2.6**
NSW DCCEEW - Water	-	**Section 4.2.7**
DPHI	-	**Section 4.2.8**
DPHI – Crown Lands	-	**Section 4.2.9**
DPIRD	-	**Section 4.2.10**
DPIRD - Fisheries	-	**Section 4.2.11**
DPIRD – NSW Resources	-	**Section 4.2.12**
EPA	-	**Section 4.2.13**
NPWS	-	**Section 4.2.14**
Rural Fire Service	-	**Section 4.2.15**
NSW Telco Authority	-	**Section 4.2.16**
TfNSW	-	**Section 4.2.17**
Transgrid	-	**Section 4.2.18**
WaterNSW	-	**Section 4.2.19**

A.2 Stakeholder Groups

Name	Submitter ID	Where are the issues addressed?
Wind Away Wentworth (WAW)	CS06	**Section 5.2, Section 5.3, Section 5.5**
Iluka Resources Limited	CS09	**Section 5.1, Section 5.2, Section 5.3, Section 5.4**
National Rational Energy Network Inc.	CS12	**Section 5.5**
SOSMoulamein	CS54	**Section 5.3**
Gol Gol Community Reference Group Inc	CS55	**Section 5.3**
Grand Junction Pty Ltd	CS57	**Section 5.1, Section 5.2, Section 5.3, Section 5.4**
Grand Junction Pty Ltd	CS58	**Section 5.2, Section 5.3**
Grand Junction Pty Ltd	CS59	**Section 5.2, Section 5.4**
Save Our Surroundings Murrumbidgee	CS74	**Section 5.5**
Save Our Surroundings Riverina	CS78	**Section 5.5**

Name	Submitter ID	Where are the issues addressed?
Grand Junction Pty Ltd	CS82	**Section 5.2, Section 5.4**
Agexpo Pty Ltd	CS90	**Section 5.1, Section 5.3**
UHI Pty Ltd	CS94	**Section 5.3**
RestofNSW / Defence Neighbours Assoc Inc.	CS95	**Section 5.3**
CWO REZist Inc.	CS96	**Section 5.1, Section 5.2, Section 5.3, Section 5.5**
CWO Pty Ltd	CS97	**Section 5.4, Section 5.5**
Rainforest Reserves Australia	CS102	**Section 5.2, Section 5.3, Section 5.4**
Wentworth Capital Pty Ltd	CS104	**Section 5.3**
Wheeldon Amigh Pty Ltd	CS105	**Section 5.1, Section 5.3, Section 5.5**
Secura Australia Pty Ltd	CS106	**Section 5.1, Section 5.5**
Save Our Surroundings (SOS)	CS117	**Section 5.3, Section 5.5**
Doctors for the Environment Australia	CS120	**Section 5.3, Section 5.5**

A.3 Individuals

Name	Submitter ID	Where are the issues addressed?
Name Withheld	CS01	**Section 5.3, Section 5.5**
Name Withheld	CS02	**Section 5.5**
John Moore	CS03	**Section 5.3**
Name Withheld	CS04	**Section 5.5**
Name Withheld	CS05	**Section 5.3, Section 5.5**
Name Withheld	CS07	**Section 5.5**
Name Withheld	CS08	**Section 5.5**
Name Withheld	CS10	**Section 5.5**
Name Withheld	CS11	**Section 5.5**
Name Withheld	CS13	**Section 5.5**
Name Withheld	CS14	**Section 5.5**
Name Withheld	CS15	**Section 5.5**
Name Withheld	CS16	**Section 5.5**
Name Withheld	CS17	**Section 5.3**
Rob Cumming	CS18	**Section 5.3**
Name Withheld	CS19	**Section 5.2**
Name Withheld	CS20	**Section 5.3**
Name Withheld	CS21	**Section 5.3**
Name Withheld	CS22	**Section 5.3**
Name Withheld	CS23	**Section 5.3**

Name	Submitter ID	Where are the issues addressed?
Name Withheld	CS24	**Section 5.5**
Name Withheld	CS25	**Section 5.3**
Name Withheld	CS26	**Section 5.3, Section 5.5**
Name Withheld	CS27	**Section 5.3**
Name Withheld	CS28	**Section 5.3**
Name Withheld	CS29	**Section 5.3**
Name Withheld	CS30	**Section 5.3**
Name Withheld	CS31	**Section 5.5**
Name Withheld	CS32	**Section 5.5**
Sharon Fawdry	CS33	**Section 5.1, Section 5.5**
Name Withheld	CS34	**Section 5.5**
Peta Cameron	CS35	**Section 5.1, Section 5.3, Section 5.5**
Name Withheld	CS36	**Section 5.5**
Name Withheld	CS37	**Section 5.5**
Name Withheld	CS38	**Section 5.3, Section 5.5**
Name Withheld	CS39	**Section 5.3, Section 5.5**
Name Withheld	CS40	**Section 5.3**
Daniel Cameron	CS41	**Section 5.1**
Name Withheld	CS42	**Section 5.3**
Name Withheld	CS43	**Section 5.3**
Name Withheld	CS44	**Section 5.3, Section 5.5**
Name Withheld	CS45	**Section 5.3**
Name Withheld	CS46	**Section 5.3**
Name Withheld	CS47	**Section 5.3**
Name Withheld	CS48	**Section 5.1, Section 5.3**
Name Withheld	CS49	**Section 5.3**
Name Withheld	CS50	**Section 5.3**
Name Withheld	CS51	**Section 5.3**
Name Withheld	CS52	**Section 5.1**
April Borchard	CS53	**Section 5.3**
Name Withheld	CS56	**Section 5.1**
Name Withheld	CS60	**Section 5.1**
Name Withheld	CS61	**Section 5.1**
Carolyn EMMS	CS62	**Section 5.3**
Name Withheld	CS63	**Section 5.1, Section 5.3**
Name Withheld	CS64	**Section 5.5**
Name Withheld	CS65	**Section 5.5**
Name Withheld	CS66	**Section 5.1, Section 5.3, Section 5.5**
Name Withheld	CS67	**Section 5.5**

Name	Submitter ID	Where are the issues addressed?
Name Withheld	CS68	**Section 5.5**
Name Withheld	CS69	**Section 5.3, Section 5.5**
Carol-Ann Fletcher	CS70	**Section 5.5**
Name Withheld	CS71	**Section 5.5**
Name Withheld	CS72	**Section 5.5**
Name Withheld	CS73	**Section 5.5**
Name Withheld	CS75	**Section 5.5**
Name Withheld	CS76	**Section 5.5**
Name Withheld	CS77	**Section 5.5**
Name Withheld	CS79	**Section 5.5**
Name Withheld	CS80	**Section 5.1, Section 5.3**
Name Withheld	CS81	**Section 5.1, Section 5.3**
Barry Bambrick	CS83	**Section 5.3, Section 5.5**
Name Withheld	CS84	**Section 5.3, Section 5.5**
Name Withheld	CS85	**Section 5.1**
Name Withheld	CS86	**Section 5.15.35.5**
Name Withheld	CS87	**Section 5.1**
Stan Moore	CS88	**Section 5.5**
Bob Wheeldon	CS89	**Section 5.1, Section 5.3, Section 5.4**
Anne Lawler	CS91	**Section 5.1**
Alan Hogan	CS92	**Section 5.3, Section 5.5**
Name Withheld	CS93	**Section 5.4, Section 5.5**
Name Withheld	CS98	**Section 5.1, Section 5.3**
Name Withheld	CS99	**Section 5.1, Section 5.3**
Name Withheld	CS100	**Section 5.1, Section 5.3**
John McBratney	CS101	**Section 5.5**
Ardi Amigh	CS103	**Section 5.3**
Ian McDonald	CS107	**Section 5.3, Section 5.5**
Name Withheld	CS108	**Section 5.5**
Name Withheld	CS109	**Section 5.5**
Name Withheld	CS110	**Section 5.3**
Name Withheld	CS111	**Section 5.1, Section 5.3**
Name Withheld	CS112	**Section 5.1**
Name Withheld	CS113	**Section 5.5**
Name Withheld	CS114	**Section 5.1, Section 5.3**
Name Withheld	CS115	**Section 5.3, Section 5.5**
Name Withheld	CS116	**Section 5.5**
Margaret Armstrong	CS118	**Section 5.3**
Name Withheld	CS119	**Section 5.3, Section 5.5**

Appendix B

Updated Statutory Compliance Table

Table B.1 Pre-conditions Table

Relevant Legislation	Pre-condition	Relevance	Relevant EIS Section
NSW Legislation			
State Environmental Planning Policy (Biodiversity and Conservation) 2021 (Biodiversity and Conservation SEPP)	Councils are restricted from granting development consent for proposals on land identified as core koala habitat without the preparation of a plan of management.	The Biodiversity and Conservation SEPP commenced in March 2022 and consolidates a number of previous SEPPs including Koala Habitat Protection 2019 and Koala Habitat Protection 2021 in Chapters 3 and 4, respectively. Wentworth LGA is identified in Schedule 2 of the Biodiversity and Conservation SEPP. Consequently, Chapter 3 applies to all land zoned RU1 Primary Production and Chapter 4 applies in respect of the remainder of the Project Area, which is zoned C2 Environmental Conservation. however, the Biodiversity and Conservation SEPP does establish any specific obligations or considerations for SSD. Potential impacts to koala habitat have been comprehensively assessed in accordance with the Biodiversity Assessment Method (BAM) and the key assessment findings are presented in the Biodiversity Development Assessment Report (BDAR).	Appendix 6 of the EIS
State Environmental Planning Policy (Resilience and Hazards) 2021 (Resilience and Hazard SEPP)	The Resilience and Hazards SEPP requires a consent authority to consider whether an industrial development is a potentially hazardous industry or a potentially offensive industry. A preliminary hazard assessment (PHA) is to be completed for potentially hazardous developments to assist the consent authority to determine acceptability.	A PHA has been completed for the Project and is presented in Appendix 16 of the EIS.	Appendix 16 of the EIS

Relevant Legislation	Pre-condition	Relevance	Relevant EIS Section
State Environmental Planning Policy (Transport and Infrastructure) 2021 (T&I SEPP)	Clause 2.36(1)(b) of State Environmental Planning Policy (Transport and Infrastructure) 2021 (TI SEPP) provides that development for the purpose of electricity generating works may be carried out by any person with consent on any land in a prescribed non-residential zone, including RU1 Primary Production. The Project Area is primarily zoned RU1 Primary Production, with some small pockets of C2 Environmental Conservation under the Wentworth LEP 2011. 'Electricity generating works' are permissible with consent within both zones under the Wentworth LEP 2011. It is noted, however, that the Project has been designed to avoid areas zoned C2 Environmental Conservation and to locate Project infrastructure within previously disturbed cropping land within the RU1 zone.	The Project is permissible with consent under the Wentworth Local Environmental Plan 2011. As such, clause 2.36(1)(b) of the T&I SEPP is not relevant.	Section 4.1.2 of the EIS
***Biodiversity Conservation Act 2016* (BC Act)**	Under the BC Act, biodiversity assessment in accordance with the Biodiversity Assessment Method (BAM) is required for any State significant development (SSD) project	A comprehensive biodiversity assessment has been undertaken in accordance with the BAM.	Appendix 6 of the EIS
***Protection of the Environment Operations Act 1997* (POEO Act)**	The POEO Act regulates pollution to the environment and requires licences for environmental protection including waste, air, water and noise pollution control. Wind farms are a scheduled activity under the POEO Act and require an Environment Protection Licence (EPL).	Should the Project be approved an EPL would be sought in relation to the Project. Section 4.42 of the *Environmental Planning and Assessment Act 1979* (EP&A) Act provides that where an SSD is authorised by development consent, an EPL necessary to carry out that development cannot be refused and must be substantially consistent with the consent.	N/A

Relevant Legislation	Pre-condition	Relevance	Relevant EIS Section
Water Management Act 2000 **(WM Act)**	Any take from surface water and groundwater sources regulated by a Water Sharing Plan (WSP) during the construction, operation and decommissioning of the Project requires licensing under the WM Act.	Water requirements will be met in accordance with the provisions of the WM Act by sourcing water from within the locality where practicable and from a licensed commercial water supplier. Water for construction purposes will be opportunistically sourced from the following methods to minimise the need for imported water: • use from existing dams where harvestable rights apply • reuse from construction sediment basins; and • reuse from rainwater tanks collecting runoff from building roofs. If it is not practicable to source water locally, then it will be brought to the Project Area by licensed external water suppliers under contract to the Project.	Appendix 13 of the EIS
Roads Act 1993 **(Roads Act)**	A consent is required under section 138 to work on or above a road or to connect a road to a classified road.	The Project will require minor works in Euston and Buronga to accommodate OSOM movements including the installation of hardstand, light pole relocations, multiple signs to be relocated, vegetation trimming. Gate and fence modifications are also required along Arumpo Road, as described in Section 3.5.8 of the EIS. Road upgrades and modifications between Port of Newcastle and Sturt Highway/ Carey Street roundabout at Euston are subject to separate planning approvals and do not form part of the EIS would be subject to further consultation with DPHI, EnergyCo and TfNSW. Conceptual designs for road upgrades are provided in Appendix 3 of the EIS. Section 138 approval will be sought from TfNSW and the applicable Councils, as required. A detailed Traffic and Transport Impact Assessment is provided in Appendix 12 of the EIS.	Section 3.5.8, Appendix 3 and Appendix 12 of the EIS

Relevant Legislation	Pre-condition	Relevance	Relevant EIS Section
Crown Land Management Act 2016 **(Crown Land Act)**	The Crown Land Act provides for the administration and management of Crown Land in NSW. Crown land may not be occupied, used, sold, leased, licensed, dedicated, reserved or otherwise dealt with unless authorised by the Crown Land Act.	The Land Parcels within the Project Area are currently designated as Crown Land (Lot 1726/DP763664, 1727/DP763667, and 3805/DP763156) and are associated with Crown Lands leases established by the Host landholders as part of the broader Crown Lands 'Western Division.' The Host landholders intend to purchase the Crown Land 'Western Land Leases' to acquire freehold title before construction. This process has commenced in accordance with the provisions of the Crown Land Act, including special provisions applicable to land in the Western Division, as well as any other relevant legislation. Of the three Crown Land parcels that will be converted to freehold title, two have received an offer to purchase (1726/DP763664 and 1727/DP763667) and the remaining parcel is well progressed through the freehold application process. In the unlikely event that host landowners are unable to obtain freehold title within the specified timeframe, adjustments to the landowner leases may be necessary to accommodate any works that may intersect areas of Crown Land. A Travelling Stock Reserve (TSR) R66986 is located along the northern extent of the Project Area at the northern portion of Arumpo Road. Consultation with Crown Lands is discussed in Section 5.0 of the EIS.	Section 2.6.2 and Section 5.0 of the EIS
Contaminated Land Management Act 1997 **(CLM Act)**	The CLM Act establishes the process for investigating and if required, remediating land that the NSW Environment Protection Authority (EPA) considers to be contaminated significantly enough to require regulation under Division 2 of Part 3.	The Project Area does not contain land listed on the Contaminated Lands Register and is not known to contain any contaminated land.	Section 2.6.5 of the EIS

Relevant Legislation	Pre-condition	Relevance	Relevant EIS Section
Commonwealth Legislation			
***Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act)**	Under the EPBC Act the approval of the Commonwealth Minister for the Environment is required for any action that may have a significant impact on a matter of national environmental significance (MNES). Approval under Part 9 of the EPBC Act is required for actions that may result in a significant impact on MNES.	The Project was referred to the Commonwealth Minister for the Environment (EPBC 2023/09500). On 7 June 2023, the Project was declared a Controlled Action under section 75 of the EPBC Act. The controlling provisions for the action are: i. World Heritage Properties (sections 12 and 12A) ii. National Heritage Places (sections 15B and 15C) iii. listed threatened species and communities (sections 18 and 18A) iv. listed migratory species (sections 20 and 20A). It was further determined that the Project will be assessed under the Bilateral Agreement between NSW and the Commonwealth (Amending Agreement No. 1). The Controlled Action Decision (EPBC 2023/09500) is provided in Appendix 1 of the EIS. Supplementary SEARs were subsequently issued by the former NSW Department of Planning and Environment. The Supplementary SEARs are included in Appendix 1 of the EIS, along with a list of protected matters identified by the Commonwealth Department of Climate Change, Energy, the Environment and Water (DCCEEW) as relevant to the Project. These requirements are addressed in detail in Appendix C of Appendix 6.	Appendix 1 and Appendix 6 of the EIS
***Native Title Act 1993* (NT Act)**	The NT Act recognises the interests and rights Aboriginal people have to land and aims to provide recognition and protection of common law native title rights.	No Native Title Determinations or Registered Claims or Indigenous Land Use Agreements are recorded within the Project Area.	Appendix 7 of the EIS

Relevant Legislation	Pre-condition	Relevance	Relevant EIS Section
Civil Aviation Regulations 1988	The Civil Aviation Regulations 1998 require any potential aviation obstacles and hazards be assessed under the National Airports Safeguarding Framework Guideline D: Managing Wind Turbine Risk to Aircraft.	The Project may be considered an aviation obstacle. An Aviation Impact Assessment has been undertaken to support the Project.	Appendix 20 of the EIS
Heavy Vehicle (Adoption of National Law) Act 2013	Relevant approvals under the Heavy Vehicle (Adoption of National Law) Act 2013 will be required for the transport of wind turbines and associated infrastructure by OSOM vehicles.	The Project will require the use of OSOM vehicles to transport wind turbines and associated infrastructure to the Project Area.	Appendix 12 of the EIS
Radio Communications Act 1992	Under Part 4.1 of the Radio Communications Act 1992, a legislative framework has been established to regulate equipment that uses or is affected by radio emissions.	Radio communications can be impacted by proposed wind farms through electromagnetic interference (EMI) produced by the turbines.	Appendix 18 of the EIS

Table B.2 Mandatory Considerations Table

Relevant Legislation	Mandatory Consideration	Relevance	Reference
Considerations under the EP&A Act and EP&A Regulation			
Objects of the Act (Section 1.3) **Relevant objects of the Act include:**	• to promote the social and economic welfare of the community and a better environment by the proper management, development and conservation of the State's natural and other resources • to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment • to promote the orderly and economic use and development of land • to protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats • to promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage).	The Project aims to provide a reliable and affordable source of energy for the people of NSW. The Project will also contribute to reducing greenhouse gas (GHG) emissions associated with energy generation and provide significant economic benefits to the region. The Project is therefore strategically located in an area identified by the NSW Government as suitable for renewable energy projects and will assist the NSW Government in delivering on the objectives for the Electricity Strategy and the South-West REZ. The Project has been designed through a comprehensive process that incorporates community and stakeholder feedback and the findings of environmental and social studies to maximise positive social and economic outcomes while minimising adverse impacts to the environment, built and cultural heritage. As such, it is considered to represent an orderly and economic use of land.	Section 2.0 and Section 7.0 of the EIS

Relevant Legislation	Mandatory Consideration	Relevance	Reference
Evaluation (Section 4.15) **In determining a development application, a consent authority is to take into consideration such of the following matters as are of relevance to the development the subject of the development application—** **(a) the provisions of:**	(i) Any environmental planning instrument that apply to the land to which the development application relates	Relevant environmental planning instruments are listed in the next sub-section of this table (see below).	Refer below
Evaluation (Section 4.15) **(1) In determining a development application, a consent authority is to take into consideration such of the following matters as are of relevance to the development the subject of the development application—** **(a) the provisions of:**	(ii) Any proposed instrument that is or has been the subject of public consultation under this Act and that has been notified to the consent authority (unless the Secretary has notified the consent authority that the making of the proposed instrument has been deferred indefinitely or has not been approved) that apply to the land to which the development application relates	At the time of preparing this EIS, there were no known proposed environmental planning instruments that are relevant to the application.	Not Applicable
Evaluation (Section 4.15) **(1) In determining a development application, a consent authority is to take into consideration such of the following matters as are of relevance to the development the subject of the development application—** **(a) the provisions of:**	(iii) Any development control plan that apply to the land to which the development application relates	As per Clause 2.10 of the Planning Systems SEPP, development control plans do not apply to SSD projects.	Not Applicable
Evaluation (Section 4.15) **(1) In determining a development application, a consent authority is to take into consideration such of the following matters as are of relevance to the development the subject of the development application—** **(a) the provisions of:**	(iii) (a) Any planning agreement that has been entered into under section 7.4, or any draft planning agreement that a developer has offered to enter into under section 7.4 that apply to the land to which the development application relates	Spark Renewables is committed to entering into a Planning Agreement with Wentworth Shire Council in respect of the Project	Section 2.8 of the EIS

Relevant Legislation	Mandatory Consideration	Relevance	Reference
Evaluation (Section 4.15) **(1) In determining a development application, a consent authority is to take into consideration such of the following matters as are of relevance to the development the subject of the development application—** **(a) the provisions of:**	(iv) The regulations (to the extent that they prescribe matters for the purposes of this paragraph) that apply to the land to which the development application relates	This EIS has been prepared in accordance with the requirements of the EP&A Regulation	Throughout the EIS
(1)(b) The likely impacts of that development, including environmental impacts on both the natural and built **environments, and social and economic impacts in the locality**	-	A detailed assessment has been undertaken with respect to the Project's environmental social and economic impacts, as documented within this EIS.	Section 6.0 of the EIS and the various specialist assessment reports provided in the Appendices.
(1)(c) The suitability of the site for the development	-	The site is considered suitable for the Project for the reasons outlined in Section 7.2 of the EIS.	Section 7.2 of the EIS
(1)(d) Any submissions made in accordance with this Act or the regulations	-	Comments to be received on the EIS during the public exhibition period will be addressed in the submissions process. Consultation has been undertaken with the community and other stakeholders to inform this EIS.	Not Applicable
(1)(e) The public interest	-	The approval of the Project is considered to be in the public interest for the reasons outlined in Section 7.0 of the EIS.	Section 7.0 of the EIS
Section 4.24	Relevant concept approval.	There are no concept approvals relevant to the Project.	Not Applicable

Relevant Legislation	Mandatory Consideration	Relevance	Reference
Considerations under other legislation			
BC Act (NSW)	Under the BC Act, biodiversity assessment in accordance with the Biodiversity Assessment Method (BAM) is required for any SSD project. The likely impact of the proposed development on biodiversity values as assessed in the biodiversity development assessment report. The Minister for Planning may (but is not required to) further consider under that Act the likely impact of the proposed development on biodiversity values.	A Biodiversity Development Assessment Report (BDAR) has been completed for the Project in accordance with the BAM.	Appendix 6 of the EIS
Civil Aviation Regulations 1988 (Cth)	Reporting of tall structures to the Royal Australian Air Force (RAAF) is required under the Civil Aviation Regulations 1988.	Development of the Project will require installation of tall structures. A detailed Aviation Impact Assessment in accordance with the regulations and consultation with the relevant agencies has been undertaken as part of the preparation of the EIS.	Appendix 20 of the EIS
Considerations under EPIs			
State Environmental Planning Policy (Resilience and Hazards) 2021 (Resilience and Hazards SEPP) **Chapter 3 Hazardous and offensive development** **Chapter 4 Remediation of Land**	Chapter 3 of Resilience and Hazards SEPP assesses the potential hazards associated with the Project by providing definitions and guidelines for hazardous industry, offensive industry, hazardous storage establishments, and offensive storage establishments. Chapter 4 of Resilience and Hazards SEPP promotes the remediation of contaminated land for the purpose of reducing the risk of harm to human health or any other aspect of the environment.	In accordance with Section 3.7 of the Hazards SEPP, this EIS has considered current circulars and guidelines published by the Department that relate to hazardous or offensive development, including: • Hazardous Industry Advisory Paper No. 4 –Risk Criteria for Land Use Safety Planning (HIPAP 4) (Department of Planning, 2011). • Hazardous Industry Planning Advisory Paper No. 6 – Guidelines for Hazard Analysis (HIPAP 6) (Department of Planning, 2011). • Multi-Level Risk Assessment (Department of Planning, 2011).	Appendix 14 and Appendix 16 of the EIS

Relevant Legislation	Mandatory Consideration	Relevance	Reference
		• Planning for Bush Fire Protection 2019 (NSW RFS, 2019). A Preliminary Hazard Analysis (PHA) has been developed for the Project (Appendix 16 of the EIS). Under Clause 4.6, a consent authority is required to consider whether a proposed development site is affected by soil or other contaminants before granting consent. An Agricultural Impact Assessment provides further discussion on the potential impacts on soil and agriculture resources associated with the Project (Appendix 14 of the EIS).	
State Environmental Planning Policy (Biodiversity and Conservation) 2021 (Biodiversity and Conservation SEPP)	Nil	The SEPP does not establish any specific mandatory considerations for SSD.	Appendix 6 of the EIS
State Environmental Planning Policy (Primary Production) 2021 (Primary Production SEPP)	The primary Production SEPP contains planning provisions to manage primary production and rural development, including supporting sustainable agriculture for the protection of prime agricultural land of state and regional significance, as well as regionally significant mining and extractive resources.	A detailed Land, Soils and Agriculture Assessment has been undertaken for the Project, informed by a soil survey.	Appendix 14 of the EIS
State Environmental Planning Policy (Resources and Energy) 2021 (Resources & Energy SEPP)	Section 2.19 of the Resources & Energy SEPP applies to land: (a) in the vicinity of an existing mine, petroleum production facility or extractive industry, or (b) identified on a map (being a map that is approved and signed by the Minister and copies of which are deposited in the head office of the	The Project Area is not in the vicinity of an existing mine, petroleum production facility or extractive industry. Additionally, it is understood that no land has been identified on a map under subsection (b) and the land is not identified by an environmental planning instrument as being the location of significant resources of minerals, petroleum or extractive materials. Accordingly, Section 2.19 does not apply to the Project.	Section 5.1.4 of the Submissions Report

Relevant Legislation	Mandatory Consideration	Relevance	Reference
	Department and publicly available on the Department's website) as being the location of State or regionally significant resources of minerals, petroleum or extractive materials, or Note— At the commencement of this Chapter, no land was identified as referred to in paragraph (b). (c) identified by an environmental planning instrument as being the location of significant resources of minerals, petroleum or extractive materials.	Nevertheless, it is noted that portions of the Project Area are subject to three (3) exploration licences (EL) and an assessment lease (AL) • EL9604 – held by Murray Basin Critical Minerals • EL9530, EL9380 and AL 24, all held by Iluka Resources Limited. There are no known approved or pending development applications for the extraction of these resources, however, Illuka Resources has announced that it is in the early planning stages of the Euston Critical Minerals Project. As such, Section 2.19 considerations are addressed in **Table A4.3** below for completeness.	

Table B.3 Considerations under Resources & Energy SEPP

Consideration	Relevance	Reference
Section 2.19(2) provides that before determining an application to which this section applies, the consent authority must—		
(a) consider— (i) the existing uses and approved uses of land in the vicinity of the development, and (ii) whether or not the development is likely to have a significant impact on current or future extraction or recovery of minerals, petroleum or extractive materials (including by limiting access to, or impeding assessment of, those resources), and (iii) any ways in which the development may be incompatible with any of those existing or approved uses or that current or future extraction or recovery, and	(i) Illuka Resources has previously announced that it is in the early planning stages of the Euston Critical Minerals Project. It is understood that while SEARs were issued for the project in 2023 (SSD-53674728), the mineral sands project is no longer visible on the Major Projects website as at the time of finalising the Submissions Report for the wind farm. (ii) Spark Renewables has sought to consult further with Illuka Resources and with NSW Resources in an effort to minimise impacts to the potential future recovery of minerals within AL24 and has proposed additional mitigation measures to manage these interactions through consultation and detailed design (refer to RES01 and RES02 in Appendix C of the Submissions Report). (iii) Subject to the mitigation measures outlined above, the Project is considered to be compatible with the future extraction or recovery of mineral resources within the Project Area.	Section 3.2 and 5.1.4 of the Submissions Report Appendix C of the Submissions Report
(b) evaluate and compare the respective public benefits of the development and the uses, extraction and recovery referred to in paragraph (a)(i) and (ii), and	The public benefits of the Project are summarised in Section 6.0 of the Submissions Report. As the mineral sands project remains in the very early planning phases, the public benefits of the project are unknown.	Section 6.0 of the Submissions Report
(c) evaluate any measures proposed by the applicant to avoid or minimise any incompatibility, as referred to in paragraph (a)(iii).	Spark Renewables has committed to additional mitigation measures to avoid or minimise any potential incompatibility through stakeholder consultation and detailed design (refer to RES01 and RES02 in Appendix C of the Submissions Report). Spark Renewables submits that these measures are sufficient to avoid or minimise any incompatibility, consistent with the objectives of the Resources & Energy SEPP.	Section 3.2 and 5.1.4 of the Submissions Report Appendix C of the Submissions Report

Table B.4 Local Environmental Plan Provisions – Wentworth Local Environmental Plan 2011 (Wentworth LEP)

Provision	Relevance	Relevant EIS Section
The EIS addresses relevant components of the Wentworth LEP. The aims of the plan include: (aa) to protect and promote the use and development of land for arts and cultural activity, including music and other performance arts, (a) to encourage and manage ecologically sustainable development within Wentworth, (b) to encourage the retention and enhancement of land that supports the primary economic activities within Wentworth for productive agriculture and other primary production purposes, (c) to conserve and protect items of European and Aboriginal cultural heritage, (d) to conserve and protect areas of environmental significance, particularly conservation parks, reserves and the Murray and Darling River systems.	The Project is considered to represent ecologically sustainable development (ESD) on the basis that: • It will provide for cleaner reliable electricity generation and assist with meeting current load demand while reducing greenhouse gas emissions and the impacts of climate change • The Project has been designed to avoid and minimise environmental, biodiversity, cultural heritage and social impacts where practical through careful design and best practice environmental protection and impact mitigation. Where impacts cannot be avoided or minimised, they will be offset in accordance with applicable State and Commonwealth Government policies. • Impacts to productive agricultural land have been assessed as minimal, temporary and limited to the Project's Disturbance Footprint. The Project will result in the temporary removal of 445 ha of land within the Project Area from agricultural land use for the duration of the Project. Spark Renewables has committed to a range of mitigation strategies to minimise land use conflicts with surrounding agricultural uses during the life of the Project and to ensure that the Project Area is returned to its pre-disturbance agricultural capability and land use following the conclusion of the Project. • The Project will not impact items of European Heritage. The Project design has also been refined to conserve and protect items of Aboriginal cultural heritage. This has included refinements to the disturbance footprint to avoid areas of high archaeological sensitivity along with subsequent refinements to avoid 21 Aboriginal sites and an area of Potential Archaeological Deposit (PAD).	Throughout the EIS
Zone Objectives: RU1 Primary Production Relevant objectives include: • To encourage sustainable primary industry production by maintaining and enhancing the natural resource base. • To encourage diversity in primary industry enterprises and systems appropriate for the area.	The Project is compatible with the zone objectives on the basis that: • The Project will facilitate co-existence between agriculture and renewable energy while enabling host landholders to diversify their income streams • A range of mitigation measures are proposed to be ensure that the potential land use conflicts with nearby land uses (including existing agricultural operations and the adjoining Mallee Cliffs National Park) are appropriately managed over the life of the Project, and to ensure the Project area is suitably rehabilitated and returned to its pre-Project land capability at the conclusion of the Project.	Appendix 14 of the EIS

Provision	Relevance	Relevant EIS Section
• To minimise the fragmentation and alienation of resource lands. • To minimise conflict between land uses within this zone and land uses within adjoining zones. • To encourage and promote the growth and diversification of economic and employment opportunities in agriculture, horticulture and tourism.		
Zone Objectives: C2 Environmental Conservation The objectives of the zone are: • To protect, manage and restore areas of high ecological, scientific, cultural or aesthetic values. • To prevent development that could destroy, damage or otherwise have an adverse effect on those values.	• The Project design has sought to respect the objectives of the zone by avoiding the placement of Project infrastructure (associated ground disturbance) within C2 zoned land to the greatest extent practicable.	N/A
Clause 4.1 Minimum Lot Size	The Project involves subdivision to create lots smaller than specified on the Lot Size Map under the Wentworth LEP 2011. Notwithstanding this, may be granted for the subdivision under 4.38 of the EP&A Act. Further details are provided in Section 4.1.2 of the EIS.	Section 4.1.2 of the EIS
Clause 7.4 Terrestrial Biodiversity This clause applies to land identified as "Terrestrial Biodiversity" on the Natural Resource—Terrestrial Biodiversity Map. (3) Before determining a development application for development on land to which this clause applies, the consent authority must consider whether or not the development— (a) is likely to have any adverse impact on the condition,	• The Project Area contains land mapped as 'Terrestrial Biodiversity'. • A comprehensive BDAR has been prepared in respect of the Project, which includes: • Identification of impacts of impacts to ecological values, including potential impacts to threatened flora and fauna species, fragmentation of habitat, changes to function and composition of vegetation communities and loss of habitat elements and connectivity. • A detailed explanation of measures to avoid and minimise impact terrestrial biodiversity to the greatest extent practical, both through Project design and the implementation of suitable mitigation and management measures • A strategy to offset the residual biodiversity impacts of the Project in	Appendix 6 of the EIS

Provision	Relevance	Relevant EIS Section
ecological value and significance of the fauna and flora on the land, and (b) is likely to have any adverse impact on the importance of the vegetation on the land to the habitat and survival of native fauna, and (c) has any potential to fragment, disturb or diminish the biodiversity structure, function and composition of the land, and (d) is likely to have any adverse impact on the habitat elements providing connectivity on the land. (4) Development consent must not be granted to development on land to which this clause applies unless the consent authority is satisfied that— (a) the development is designed, sited and will be managed to avoid any significant adverse environmental impact, or (b) if that impact cannot be reasonably avoided—the development is designed, sited and will be managed to minimise that impact, or (c) if that impact cannot be minimised—the development will be managed to mitigate that impact.	accordance with the BAM. • Accordingly, it is submitted that requirements of Clause 7.4 have been satisfied.	

Table B.5 Other State Approvals

Other State Approval	Description
Relevant Section – of EP&A Act: Section 4.41 - Approvals that are not required Section 4.41 of the EP&A Act specifies authorisations which are not required for approved SSD	The following approvals will not be required by operation of Section 4.41: • *Fisheries Management Act 1994* – a permit under section 201, 205 or 219. • *National Parks and Wildlife Act 1974* – an Aboriginal heritage impact permit under section 90. • *Rural Fires Act 1997* – a bushfire safety authority under section 100B. • *Water Management Act 2000* – a water use approval under section 89, a water management work approval under section 90 or an activity approval (other than an aquifer interference approval) under section 91.
Relevant Section – of EP&A Act: Section 4.42 - Approvals that must be applied consistently Section 4.42 of the EP&A Act requires that several approvals, if required for a SSD, cannot be refused if a development consent is granted and must be substantially consistent with the terms of any development consent granted for the development.	The following approvals will be required to carry out the development: • Protection of the Environment Operations Act 1997 – an EPL under Chapter 3. • *Roads Act 1993* – consent(s) under section 138 for work within a public road.
Conveyancing Act 1919 (NSW) (Conveyancing Act)	The Project involves subdivision to create new freehold lots and to facilitate the registration of long-term leases as described in Section 3.2.1 of the EIS, in accordance with the requirements of the Conveyancing Act. The registration of long-term leases may occur by: • registration of plans of subdivision for lease purposes, or • such other manner as may be required under the Conveyancing Act.

Appendix C

Updated Mitigation Measures

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Aspect	ID #	Mitigation and/or Management Measure	Timing	Relevant EIS Section/Appendix
Biodiversity	B01	The removal of native vegetation will be minimised through detailed design and demonstrative compliance in pre-construction plans. An initial corridor was established to identify areas of highest quality vegetation. Where feasible the Development Footprint has been placed within non-native and lowest quality native vegetation. Areas of high-quality vegetation have been avoided. To avoid and minimise further clearing of vegetation the Development Footprint has utilised existing tracks, existing paddocks/crops and cleared areas.	Detailed design and project surveys	Appendix D of the Submissions Report
Biodiversity	B02	Buffer mapping for habitats will provide the construction and maintenance teams with the information necessary for OEMP and the CEMP.	Detailed design	Appendix D of the Submissions Report
Biodiversity	B03	Threatened fauna habitat removal must be minimised through detailed design.	Detailed design	Appendix D of the Submissions Report
Biodiversity	B04	The preparation and approval of a Biodiversity Management Plan (BMP) prior to construction which will be prepared by a qualified ecologist with CPHR and NPWS consultation. Prior to clearing, the operational management component will be approved with CPHR consultation. The BMP will include but not limited to: • Implementing mitigation measures. • Evaluating mitigation measures. • Objectives for monitoring. • Performance of proposed measures. • Informing an adaptive management method for additional offsets which further impacts are identified. • Remedial action.	Pre-clearing, pre-construction, construction and operation	Appendix D of the Submissions Report

Aspect	ID #	Mitigation and/or Management Measure	Timing	Relevant EIS Section/Appendix
Biodiversity	B05	If any unexpected threatened species (flora or fauna) are found during construction, work must be halted immediately in the vicinity of the discovery, and the onsite manager should be notified.	Pre-clearing, pre-construction, construction and operation	Appendix D of the Submissions Report
Biodiversity	B06	Barbed wire must be avoided for fencing where practicable to avoid entrapment of fauna on fences. Fences will be designed to ensure that fauna are not funnelled toward dead ends or to create barriers between areas of habitat across the Project Area.	Detailed design	Appendix D of the Submissions Report
Biodiversity	B07	Mitigation measures for harm to threatened hollow dependent fauna and live animals during pre-clearing surveys and translocation activities will be detailed in the BMP. This includes, but is not limited to: • Validation and mapping of all hollow bearing trees within the Development Footprint will be undertaken at least one month prior to vegetation removal. • Qualified and licenced ecologist or wildlife handler to rescue and re-located fauna during the pre-clearing surveys. Protocols in place when hollow bearing trees and stick nests are being removed. Furthermore, mitigation protocols for mitigating harm to hollow or stick nest dependent threatened fauna or dependent habitat known in the Development Footprint.	Pre-clearance	Appendix D of the Submissions Report
Biodiversity	B08	During vegetation and habitat clearance work a qualified ecologist will conduct on-foot pre-clearance surveys at the start of each day prior to daily construction. This is to confirm there is no wildlife present in the area to be cleared. A qualified ecologist or qualified wildlife handler will also be present during vegetation and habitat clearing works to rescue and relocate fauna if required in the event individuals are present at the time of clearing.	During clearing and construction	Appendix D of the Submissions Report

Aspect	ID #	Mitigation and/or Management Measure	Timing	Relevant EIS Section/Appendix
		Additionally: • Contracted environmental representatives are to regularly conduct sweeping by regular driving through areas of the planned construction in the Development Footprint prior to planned clearance works to disturb the area and deter fauna from utilising these areas. • In the situation that an animal or threatened species is located in the construction area during other construction works, the Project Management Site Representative and Delivery Manager must be immediately notified. Work must immediately stop within the construction area with an ecologist or a local wildlife rescuer to be brought on-site for handling and to follow the rescue procedures listed in the BMP.		
Biodiversity	B09	Exclusion zones within the Development Footprint will be marked by a qualified surveyor on site with the boundary of clearing limits. There will be specific exclusion zones included of known areas of threatened flora and fauna habitat.	Pre-clearance, construction and early operation	Appendix D of the Submissions Report
Biodiversity	B10	Measures to mitigate the impacts associated with construction activities on retained native vegetation and habitat will include: • Prior to all vegetation removal, pre-clearance inspections will be undertaken by a qualified ecologist. • Where possible, trim vegetation rather than clear or removal whole plants. • Retain tree roots where possible. Retain dead trees and tree trunks where practical.	Pre-construction, Construction	Appendix D of the Submissions Report

Aspect	ID #	Mitigation and/or Management Measure	Timing	Relevant EIS Section/Appendix
Biodiversity	B11	The preparation and approval of a Rehabilitation Plan (RP) prior to clearing will be prepared in consultation with CPHR. The RP will detail the implementation of rehabilitation in areas of the Development Footprint. The detailed design may include areas requiring rehabilitation and areas of disturbance during the construction that do not require maintenance or clearance for the operation of the Project. The RP will include but is not limited to: • Soil erosion preventative measures, re-establishing local PCTs, local native flora, habitat and detailed rehabilitation objectives which measure the outcomes for the success over the locations, target landforms and PCTs. • Restoring vegetation in riparian areas implementation measures to protect and improve areas of key habitat. • Remedial actions that have been triggered that includes notifying CPHR through a Trigger Action Response Plan (TARP) with an agreement about the response. • Native indigenous species used for landscaping on pervious surfaces. • Stabilisation of exposed surfaces to prevent soil loss. • Ongoing maintenance which includes but is not limited to weed and pathogen management on rehabilitated areas. During construction, the topsoil and subsoil generated will be used for rehabilitation and stored on-site.	Pre-construction, pre-clearance, during and post-construction	Appendix D of the Submissions Report

Aspect	ID #	Mitigation and/or Management Measure	Timing	Relevant EIS Section/Appendix
Biodiversity	B12	Weed monitoring and control programs are to be documented in the BMP and Trigger Action Response Plan as part of a Construction Soil and Water Manager Plan (CSWMP) detailed in the CEMP and implemented in consultation with CPHR. Any deviation from measures approved are to be raised and approved. Additional monitoring and control measures for introduced plant establishment and spread must be implemented at and around locations utilised for sediment control structures. Weed monitoring and control programs will include adaptive management strategies for priority weed species during construction, and early operational phase.	Pre-clearance, construction and operation	Appendix D of the Submissions Report
Biodiversity	B13	All priority weeds, as listed on the DPI NSW WeedWise website - https://weeds.dpi.nsw.gov.au/WeedBiosecurities?AreaId=137 for the Wentworth (Western region), are to be managed and controlled, in addition to weed species that have been recorded to commonly occur within the Project Area such as London rocket (*Sisymbrium irio*), Ward's weed (*Carrichtera annua*), smooth catsear (*Hypochaeris glabra*), medics (*Medicargo sp.*) and wiry noon-flower (*Psilocaulon granulicule*).		
Biodiversity	B14	Vehicle and machinery hygiene measures will be enforced at all entry/exit points during construction and operation, ensuring removal of soil and plant matter to prevent weed spread. as part of the BMP. This must be implemented during construction and operation. The strategy will include site specific locations, timings, and methods for removing soil and plant matter from vehicles and machinery. Hygiene measures stated in the strategy protocol must be applied during construction and operation to ensure vehicle and machinery hygiene.		

Aspect	ID #	Mitigation and/or Management Measure	Timing	Relevant EIS Section/Appendix
Biodiversity	B15	Weeds will be disposed and managed appropriately during clearing works, to stop the spread of invasive weed species.		
Biodiversity	B16	Construction of wash down stations will occur at suitable locations to wash down vehicles and employee shoes to stop the spread of weeds, pathogens (including *Phytophthora cinnamomi*, amphibian chytrid fungus, agricultural weeds, and exotic rust fungi) and the introduction of new species to the site.		
Biodiversity	B17	Refuse and personal waste generated throughout the construction and operational phases will be stored in bins and discarded in a suitable waste storage facility.	Construction and operation	Appendix D of the Submissions Report
Biodiversity	B18	Implementation of a monitoring program for feral animals which is based on performance triggers for adaptive management. If an increase in predator activity is identified, it will trigger the need for a control program based on measures related to performance. This will be outlined in the BMP with control done in consultation of host landowners.	Construction and operation	Appendix D of the Submissions Report
Biodiversity	B19	In addition to Action B18, regularly scheduled monitoring that does not rely on entirely on population spikes in pest species numbers will also occur. These monitoring periods will use predictive indicators such as seasonal trends, habitat disturbance and food availability to predict pest number outbreaks before they occur.	Quarterly during construction and operation	Appendix D of the Submissions Report
Biodiversity	B20	Control measures including regular baiting and trapping will be used during low pest periods.	Construction and operation	Appendix D of the Submissions Report
Biodiversity	B21	To measure impacts on bird and bat species, a Bird and Bat Adaptive Management Plan (BBAMP) will be prepared as part of the BMP. The BBAMP will be prepared in consultation with NPWS (and other agencies as detailed in the BDAR). Further details are provided in Section 9.2.2 of the BDAR.	Construction and operation	Appendix D of the Submissions Report

Aspect	ID #	Mitigation and/or Management Measure	Timing	Relevant EIS Section/Appendix
Biodiversity	B22	Measures taken to protect birds include: • Nests within 200 m of the Development Footprint will be mapped and validated prior to the erection and operation of WTGs. • Nests will be inspected prior to removal for juvenile birds and avoidance or relocation to be undertaken under the guidance of a qualified ecologist. • Regular carcass removal will be undertaken to prevent raptors being attracted to the Project Area. • Reduction of potential perching locations must be incorporated in the Project design. Power lines will be fitted with species specific measures to avoid unnecessary collisions.		
Biodiversity	B23	Clearing/works will be contained within approved areas	Construction	Appendix D of the Submissions Report
Biodiversity	B24	Implement speed limits on newly formed access tracks to reduce the risk of vehicle strikes to fauna specifically in areas surrounding permanent water bodies and close to farm dams, particularly after periods of rain. Speed limits will be specified in the BMP and will be determined having regard to vehicle strike risk levels to fauna across the Project Area, work health and safety considerations and interactions with agricultural operations.	Pre-construction, construction and decommissioning	Appendix D of the Submissions Report
Biodiversity	B25	A Construction Soil and Water Management Plan (CSWMP) will be prepared as a part of the CEMP. This will include but not limited to: • Procedures to minimise and manage erosion and sediment transport within the project site and offsite. • The preparation of Erosion and Sediment Control Plan (ESCP) for construction.	Pre-construction, construction and decommissioning	Appendix 13 of the EIS EIS Section 6.2, Section 6.9 and Section 6.10 Appendix D of the Submissions Report

Aspect	ID #	Mitigation and/or Management Measure	Timing	Relevant EIS Section/Appendix
		• Procedures to manage accidental spills with the requirement to maintain spill kits. • Procedures to manage the potential of any acid sulfate soils (ASS) in accordance with the NSW Acid Sulfate Soil Guidelines (Ahern et al. 1998). • Procedures to manage potential tannin leachate. • Procedures to manage stockpiles. Details of surface water quality monitoring procedures.		
Biodiversity	B26	As part of the CSWMP, a construction ESCP will be prepared. This will detail erosion and sediment control procedures that will be implemented within the Project Area in accordance with the principles and requirements of Managing Urban Stormwater – Soils and Construction, Volume 1 (Landcom, 2004).	Pre-construction and construction	Appendix 13 of the EIS EIS Section 6.2, Section 6.9 and Section 6.10 Appendix D of the Submissions Report
Biodiversity	B27	To minimise and avoid any impacts threatened species and water quality, the following procedure will be implemented: • The total bare earth exposed at any time will be minimised. • Rehabilitation strategies to be implemented to minimise dust regeneration, soil erosion and weed incursion. Rehabilitate all areas of the Project Area that are not proposed for future disturbance post construction and when decommissioning.	Construction and decommissioning	Appendix 13 of the EIS EIS Section 6.2, Section 6.9 and Section 6.10 Appendix D of the Submissions Report
Biodiversity	B28	Prior to, during and following construction and decommissioning, a surface water monitoring program will be prepared and implemented as part of the CSWMP.	Pre-construction, construction and decommissioning	Appendix 13 of the EIS EIS Section 6.2, Section 6.9 and Section 6.10 Appendix D of the Submissions Report

Aspect	ID #	Mitigation and/or Management Measure	Timing	Relevant EIS Section/Appendix
Biodiversity	B29	As part of the CSWMP, Project specific procedures and controls will be prepared and implemented. This is to minimise the risk of spills, litter and leaks entering downstream waterways and/ or leaking into the soil and groundwater table. The CSWMP will include, but is not limited to: • All liquids, chemicals and fuels to be stored in a sealed bunded area and stored on level ground within the construction compound. • Appropriate storage of equipment and hazardous substances during construction and operation. • Designated areas with spill capture and management controls for refuelling and minor activities. • An emergency spill response procedure will be prepared in the CSWMP. • Regular water quality checks to be carried out at waterways within proximity to work being carried out. Installation and maintenance of control measures such as gross pollutant traps and silt fencing.	Construction and decommissioning	Appendix 13 of the EIS EIS Section 6.2, Section 6.9 and Section 6.10 Appendix D of the Submissions Report
Biodiversity	B30	The management of stockpiles to minimise the transport of dust, sediment and leachate runoff. This will include, but is not limited to: • Minimising time that the stockpiles are left exposed, the number of stockpiles and the areas used for stockpiles. • Designating stockpiles away from waterways, drainage lines and areas where they would be susceptible to wind erosion. Establishing appropriate controls for sediment, stabilising stockpiles and suppressing dust as required.	Construction	Appendix D of the Submissions Report

Aspect	ID #	Mitigation and/or Management Measure	Timing	Relevant EIS Section/Appendix
Biodiversity	B31	Measures to avoid ingress from concrete waste into downstream waterways will be incorporated into the detailed design of concrete batch plants and outlined in the CEMP.	Construction and operations	Appendix D of the Submissions Report
Biodiversity	B32	Stormwater runoff increases during the Project operation will be managed through, but not limited to: • The design of permanent drainage and water management to meet the Project performance outcomes of no pollution of water. • Control procedures and maintenance of access tracks and scour protection to minimise erosion and impacts on water quality. Potential impacts on channel erosion and scour to be monitored at receiving drainage channels and waterways downstream.	During Operation	Appendix 13 of the EIS EIS Section 6.2, Section 6.9 and Section 6.10 Appendix D of the Submissions Report
Biodiversity	B33	Within the detailed design, if the Project excavation exceeds the proposed maximum depth below ground level, potential impacts to GDEs will need to be re-assessed by a qualified hydrogeologist.	Detailed design and construction	Appendix 13 of the EIS EIS Section 6.2 and Section 6.9 Appendix D of the Submissions Report
Biodiversity	B34	The Project will implement the following permanent bush fire protections: • Asset Protection Zones (APZs) around each WTG. • APZs around the BESS and substations. • An APZ around the operation and maintenance facility (to be constructed to a BAL-12.5 standard). • Perimeter firebreak. • Ongoing vegetation management. • Access for emergency response vehicles. • A permanent, dedicated firefighting water source. • Controls on Project actions to prevent bush fire ignition.	Construction and operation	Appendix 17 of the EIS EIS Section 6.2 and Section 6.13.2 Appendix D of the Submissions Report

Aspect	ID #	Mitigation and/or Management Measure	Timing	Relevant EIS Section/Appendix
		• Fire suppression systems in substations, BESS and WTGs. • A Project fire fighting vehicle.		
Biodiversity	B35	Construction and Operation Bush Fire Emergency Management Plans will be developed in accordance with Planning for Bush Fire Protection (PBP) (NSW Rural Fire Service (RFS), 2019) and in consultation with the NSW RFS (including any requirements in relation to aerial firefighting). These plans will identify all pertinent bush fire risk and mitigation strategies relating to the construction and operation of the Project, including those listed in B29 and: • Actions to prevent bush fire ignition or spread from Project activities. • Work that will not be conducted during total fire bans. • Appropriate safety procedures and storage location for any fuels or other hazardous or flammable materials. • Protocols in place to alert NSW RFS regarding work with the potential to cause a fire to the surrounding vegetation. • Protocols and triggers to shut down WTGs with an approaching fire. • Measures relating to the requirements of NSW RFS or other authorities regarding the management risk to aerial firefighting in the region. • Escalation notifying protocols with contact details for the local NSW RFS Fire Control Centre, local fire brigades, CASA, Air Services Australia, and all other relevant people and / or organisations who will be notified of an emergency at the Project Area.	Construction and operation	Appendix 17 of the EIS EIS Section 6.2 and Section 6.13.2 Appendix D of the Submissions Report

Aspect	ID #	Mitigation and/or Management Measure	Timing	Relevant EIS Section/Appendix
		• The locations of any firefighting water along with alternative water supplies that may be available in the case of an emergency (including any other fire suppression equipment held on and off site). • Bush fire emergency planning that includes evacuation routes, evacuation triggers and when and where to take refuge.		
Biodiversity	B36	To address noise that is likely to exceed acceptable noise management levels (NMLs) a Construction Noise Management Plan will be implemented as a component of the CEMP.	Construction and operation	Appendix 10 of the EIS EIS Section 6.2 and Section 6.6 Appendix D of the Submissions Report
Biodiversity	B37	Standard noise mitigation measures will be implemented where reasonably practicable, including the following: • Work limited to standard hours of construction unless permitted by the development consent. • Adopt low-noise and plant equipment, where feasible plant and equipment to be fitted out with silencing devices. • Implement less intrusive alternatives to reverse beepers such as 'squawker' or broadband' alarms. • All plant and equipment to be well maintained. • Warrant equipment mufflers are functioning correctly and effectively. • When feasible, employ construction techniques that produce less vibration and are quieter. • Equipment that is on-site be turn-off when not in use. • Only have necessary equipment on-site, including only having necessary size and powered equipment for tasks.	Pre-construction, Construction and operation	Appendix 10 of the EIS EIS Section 6.2 and Section 6.6 Appendix D of the Submissions Report

Aspect	ID #	Mitigation and/or Management Measure	Timing	Relevant EIS Section/Appendix
		• Noisy activities will be concentrated at one location and relocate as soon as possible. • Vehicle movements limited and avoided whenever feasible. • Provide training to acquaint employees with noise sensitivity. • For concentrated, noise-intensive activities implemented temporary construction noise barriers or earth mounds. • Install enclosures around noisy mobile and fixed equipment were reasonably practicable. • Where reasonably practicable avoid coincide operation of two or more noisy plants close to receivers. • Optimise the offset distance between sensitive receivers and noisy plants. • Implement parking, loading/unloading areas and traffic flow management to minimise reversing movements. Implement routinely monitoring of construction noise levels ensure effectiveness of mitigation measures and whether revision of measures in required.		
Biodiversity	B38	Standard vibration mitigation measures from the Assessing Vibration: a technical guideline (DECC, 2006) will be implemented were reasonably practicable, including the following: • Where reasonably practicable selecting lower-impact equipment or techniques were feasible. • Operating vibration-causing plant and equipment during the least sensitive time of day were reasonably practicable. • Avoid coincide operation of vibration-causing operations. • High-vibration activities to be located as far away from sensitive receiver areas as possible. • All plant and equipment to be well maintained.	During construction	Appendix 10 of the EIS EIS Section 6.2 and Section 6.6 Appendix D of the Submissions Report

Aspect	ID #	Mitigation and/or Management Measure	Timing	Relevant EIS Section/Appendix
		• Intensive vibration operation to not occur within the recommended safe set back distances. Receivers to be notified regarding the nature of construction phases and vibrations-generating operations.		
Biodiversity	B39	Air quality management measures will be implemented and include but is not limited to: • Haul routes clearly marked. • Maintenance and watering of haul routes. • Vehicle speed restriction. • Immediate clean-up of any material spillage. • During adverse weather conditions e.g. during hot and windy conditions weather will be monitored.	During construction	Appendix 15 of the EIS EIS Section 6.2 and Section 6.11 Appendix D of the Submissions Report
Biodiversity	B40	Edge effect mitigation measures will include: • Exclusion zones will be set up at the limit of clearing • Vegetation Integrity (VI) Plot Surveys • Biodiversity Monitoring and Impact Triggers.	During construction	Appendix D of the Submissions Report
Biodiversity	B41	Spark Renewables will ensure that no incidental ground disturbance (including sediment control measures) or parking of vehicles or plant occurs within the drip lines of any existing trees adjoining the Silver City Highway, whilst undertaking the proposed road upgrades.	Pre-construction minor works	Section 5.0 of the Amendment Report
Heritage	ACH01	Before any works occur, Spark Renewables will develop an Aboriginal Cultural Heritage Management Plan (ACHMP) to mitigate and manage impacts to all Aboriginal heritage sites within and directly adjacent to the Project Area. The ACHMP may be prepared on a staged basis as relevant to the construction, operational and decommissioning phases of the Project.	Prior to construction	Appendix E of the Submissions Report

Aspect	ID #	Mitigation and/or Management Measure	Timing	Relevant EIS Section/Appendix
Heritage	ACH02	The ACHMP will include the following general management and mitigation measures to ensure the protection of any sites that are located outside the proposed works area, including the sites of high, moderate or unknown significance, AHIMS 46-3-0227 (Mallee Wind Farm Open Site 1) and AHIMS 46-3-0236 (Mallee Windfarm PAD). All sites that are protected under these general management strategies are listed in Table 11.3 of the ACHA. The ACHMP will include the following: a. Measures to ensure all vehicles, machinery and personnel associated with the Project remain within the Disturbance Footprint, unless they are carrying out pedestrian monitoring or surveying work that does not involve ground breaking works. Vehicles are restricted to property tracks that are not associated with known sites, which is considered low impact. b. Commitments to install clear signage to ensure that all personnel remain within the Disturbance Footprint. Where access roads extend beyond the Disturbance Footprint, signage must explicitly state that personnel must remain confined to the designated road alignment at all times. c. Provisions for monitoring potential impacts to ensure the protection of the World Heritage Values associated with any World Heritage and National Heritage properties located within the local area based on the mitigation measures listed in Table 10.5 of the ACHA. d. Provisions for protecting Aboriginal heritage items outside the Disturbance Footprint.	Prior to construction	Appendix E of the Submissions Report

Aspect	ID #	Mitigation and/or Management Measure	Timing	Relevant EIS Section/Appendix
		e. Protocols for managing the discovery of human remains and previously unidentified heritage items within and adjacent to the Disturbance Footprint. f. A contingency plan and reporting procedure if Aboriginal heritage items within or in close proximity to the Disturbance Footprint are incidentally damaged. g. Protocols for conducting further archaeological and heritage assessment in disturbance areas where this assessment has not already been carried out. h. Measures to ensure any workers on-site receive suitable heritage inductions prior to carrying out any work on site. i. Measures to maintain and manage reasonable access for Aboriginal stakeholders to visit heritage items on site. j. Provisions for ongoing consultation with Aboriginal stakeholders for the conservation and management of Aboriginal cultural heritage on site. k. A program to monitor and report on the effectiveness of these measures and any heritage impacts of the Project.		
Heritage	ACH03	The ACHMP will contain strategies to protect and reduce impacts to sites located within the proposed work area. These sites and their relevant management strategies are detailed in Table 11.3 of the ACHA. In particular: a. Sites that will be managed through Community Collection are to be salvaged prior to any works taking place with the assistance of Registered Aboriginal Parties (RAPs). The community collection methodology is present in Appendix A of the ACHA.	During construction and operations	Appendix E of the Submissions Report

Aspect	ID #	Mitigation and/or Management Measure	Timing	Relevant EIS Section/Appendix
		b. The ACHMP is to allow for the proposed works to impact sites listed as 'impacted' in Table 11.3 without any mitigation strategies.		
Heritage	ACH04	In the event that unexpected finds occur during any activity within the Project Area, all works in the vicinity must cease immediately. The find must be left in place and protected from any further harm. Depending on the nature of the find, the following processes must be followed: a. If, while undertaking the activity, an Aboriginal object is identified, it is a legal requirement under Section 89A of the NPW Act to notify Heritage NSW, as soon as possible. b. If human skeletal remains are encountered, all work must cease immediately and NSW Police must be contacted; they will then notify the Coroner's Office. Following this, if the remains are believed to be of Aboriginal origin, then the Aboriginal stakeholders and Heritage NSW must be notified.	At all times during the carrying out of the development	Appendix E of the Submissions Report
Heritage	ACH05	Spark Renewables will continue to inform Aboriginal stakeholders about the management of Aboriginal cultural heritage within the Project Area throughout the life of the Project. The consultation outlined as part of this ACHA is valid for a period of 6 months and must be maintained for it to remain continuous and comply with Consultation Requirements (Department of Environment, Climate Change and Water NSW 2010a).	At all times during the carrying out of the development	Appendix E of the Submissions Report
Heritage	HH01	An unexpected heritage finds protocol will be established and included in the environmental management policies for the Project. All project team members and construction contractors will undertake a heritage specific induction to support the use of this protocol.	Prior to commencement of construction	Appendix 7 of the EIS and EIS Section 6.3

Aspect	ID #	Mitigation and/or Management Measure	Timing	Relevant EIS Section/Appendix
Heritage	HH02	If historical archaeological relics not assessed or anticipated by this report are found during undertaking of the works, all works in the immediate vicinity are to cease immediately and Heritage NSW be notified. A qualified archaeologist is to be contacted to assess the situation and consult with Heritage NSW regarding the most appropriate course of action.	Pre-clearance, construction, operation and decommissioning	Appendix 8 of the EIS and EIS Section 6.4
Heritage	HH03	Should the development be altered significantly from the proposed design, then a reassessment of the heritage impact may be required. This includes any impacts not explicitly stated in the SoHI and the installation of any subsurface services.	Pre-clearance, construction, operation and decommissioning	Appendix 8 of the EIS and EIS Section 6.4
Heritage	HH04	Provide a copy of the SoHI to relevant stakeholders including the Wentworth Historical Society and Heritage NSW.	Prior to commencement of construction	Appendix 8 of the EIS and EIS Section 6.4
Landscape and visual	LV01	WTGs will have a matte white, non-reflective finish and consist of three (3) blades with uniformity of colour, design, rotational speed, height and rotor diameter throughout.	At all times during the carrying out of the development	Appendix 9 of the EIS and EIS Section 6.5
Landscape and visual	LVO2	With respect to transmission lines, the following mitigation methods would apply: • Where possible underground cabling is to be used to connect WTGs to the electricity grid. • Utilise existing transmission lines where possible. • The route for any proposed overhead transmission lines should be chosen to reduce visibility from surrounding areas. • Plan route to minimise vegetation loss. • Use of subtle colours and a low reflectivity surface treatment on power poles to ensure that glint is minimised.	At all times during the carrying out of the development	Appendix 9 of the EIS and EIS Section 6.5

Aspect	ID #	Mitigation and/or Management Measure	Timing	Relevant EIS Section/Appendix
Landscape and visual	LV03	With respect to internal access roads, the following mitigation methods would apply: • Where possible utilise or upgrade existing roads, trails or tracks to provide access to the proposed WTGs to reduce the need for new roads. • Allow for the provision for downsizing roads or restoring roads to existing condition following construction where possible. • Any new roads must minimise cut and fill and avoid the loss of vegetation. • Utilise local materials where possible and practical.	At all times during the carrying out of the development	Appendix 9 of the EIS and EIS Section 6.5
Landscape and visual	LV04	With respect to ancillary infrastructure, the following mitigation methods would apply: • Siting to ensure minimal vegetation loss. • Consideration should be given to controlling the type and colour of building materials used. Where possible a recessive colour palette is to be used which blends into the existing landscape. • Avoidance of unnecessary lighting, signage on fences, logos etc. • Any proposed buildings to be sympathetic to existing architectural elements in the landscape. • Minimise cut and fill and loss of existing vegetation throughout the construction process. • Boundary screen planting is an effective mitigation method which could be utilised to ameliorate potential visual impacts resulting from the construction of ancillary structures with a small vertical scale such as collector substations, switching stations and the operations facilities building.	At all times during the carrying out of the development	Appendix 9 of the EIS and EIS Section 6.5

Aspect	ID #	Mitigation and/or Management Measure	Timing	Relevant EIS Section/Appendix
Landscape and visual	LV05	With respect to lighting of ancillary infrastructure, the following principles will be applied: • If used, air navigation lighting should be spaced around the outer edges of the wind farm. Lights are not required on every tower. Where possible, careful consideration should be given to the selection of WTGs requiring lighting to avoid unnecessary impact upon residences. • Treatment of the rear of blades with a non-reflective coating to reduce reflection off the rotating blade at night. • Use of the lowest candela intensity allowed by CASA. • According to the CASA requirements, shielding may be provided to restrict the downward spill of light to the ground plane by ensuring that no more than 5% of the nominal light intensity should be emitted at or below 5° below horizontal. • No light should be emitted at or below 10° below horizontal.	At all times during the carrying out of the development	Appendix 9 of the EIS and EIS Section 6.5
Landscape and visual	LV06	With respect to shadow flicker, Spark Renewables will consider the need for potential mitigation in consultation with Wentworth Shire Council. Potential mitigation measures may include warning signs, reduced speed limits or other controlled traffic measures along the affected portion of Arumpo Road which may be agreed in consultation with Wentworth Shire Council.	During operations	Appendix 9 of the EIS and Section 5.3.3 of the Submissions Report
Noise and Vibration	NV01	The predicted operational WTG noise levels will be updated with the final layout and sound power levels of the final WTG model selected for the Project to verify compliance with the criteria in accordance with the Noise Bulletin prior to construction. The predicted operational WTG noise levels will also be updated to verify that predicted WTG noise levels at the Mallee Cliffs National Park boundary, when adjusted for tonality and low-frequency noise, will not exceed Leq 50 dB(A) for wind speed of 4 m/s or cut-in speed, whichever is greater.	Prior to construction	Appendix 10 of the EIS and EIS Section 6.6

Aspect	ID #	Mitigation and/or Management Measure	Timing	Relevant EIS Section/Appendix
Noise and Vibration	NV02	The predicted operational ancillary infrastructure noise levels will be updated with the final design and sound power levels of the final equipment selection to verify compliance with the criteria in accordance with the NPfI prior to the commencement of construction.	Prior to operation	Appendix 10 of the EIS and EIS Section 6.6
Noise and Vibration	NV03	An operational noise management plan will be prepared which identifies how compliance with the Project's operational noise limits will be demonstrated, including details of testing procedures and reporting time frames following commencing of operation of the Project.	Prior to operation	Appendix 10 of the EIS and EIS Section 6.6
Noise and Vibration	NV04	Following construction, compliance monitoring will be conducted to satisfy the Noise Bulletin including evaluation of special noise characteristics.	Prior to operation	Appendix 10 of the EIS and EIS Section 6.6
Noise and Vibration	NV05	Notwithstanding the anticipated compliance, and mitigation measures above, Spark Renewables will provide consideration to available contingency strategies to reduce noise levels, if require. The following summarises the two (2) key measures available to reduce the noise: • Procurement contract: The procurement contract for the supply of WTGs to the Project will typically include specifications concerning the allowable total noise emissions from the WTG, and the permissible characteristics of the WTG. In the event that WTG emissions are found to exceed the contracted values, the supplier will be required to implement measures to reduce the noise to the contracted value. This can include measures to rectify manufacturing defects or appropriate control settings. • Noise reduction management strategy: modern wind farms include control systems which enable the operation of the WTGs to be varied according to environmental constraints.	Prior to construction	Appendix 10 of the EIS and EIS Section 6.6

Aspect	ID #	Mitigation and/or Management Measure	Timing	Relevant EIS Section/Appendix
		Specifically, variable pitch WTGs as proposed for this Project include control functions which enable the noise emissions of the WTGs to be selectively controlled; by adjusting the pitch of blade, the noise emissions of the WTG can be reduced. In addition, where required, the WTGs can be selectively shut down under relevant wind speeds and directions. These types of control measures can be used separately, or in combination, to achieve noise reductions for predetermined wind speed ranges and directions.		
Noise and Vibration	NV06	A Construction Noise and Vibration Management Plan (CNVMP) will be prepared and implemented for the Project. Any future CNVMP will include site and process specific noise management work practices designed to mitigate the impact of construction noise activities, including traffic noise. Any targeted noise consultation requirements will be outlined.	Prior to pre-construction, construction	Appendix 10 of the EIS and EIS Section 6.6
Social	S01	Continue to develop the AES in accordance with the objectives and commitments outlined within the SIA.	At all times during the carrying out of the development	Appendix 11 of the EIS and EIS Section 6.7
Social	S02	Continue to develop a CBS in accordance with the objectives and commitments outlined within the SIA.	At all times during the carrying out of the development	Appendix 11 of the EIS and EIS Section 6.7
Social	S03	Continue to develop an IAPP in accordance with the objectives and commitments outlined within the SIA.	At all times during the carrying out of the development	Appendix 11 of the EIS and EIS Section 6.7
Social	S04	Continue to implement the CSEP.	At all times during the carrying out of the development	Appendix 11 of the EIS and EIS Section 6.7

Aspect	ID #	Mitigation and/or Management Measure	Timing	Relevant EIS Section/Appendix
Traffic	TT01	To improve the awareness of the local residents and community of the Project and the associated Project traffic, and assist in managing the potential traffic impacts, it is recommended that a community information and awareness program be implemented for the Project.	At all times during the carrying out of the development	Appendix 12 of the EIS and EIS Section 6.8
Traffic	TT02	Undertaken prior to construction commencing and then at regular intervals during the construction period, a program of consultation should be initiated to ensure local residents are aware of construction traffic accessing the Project, and any specific traffic management issues or measures to be implemented. This program may include elements of the following as appropriate to the relevant phase of Project works: • Press releases in local newspapers. • Specific emails, newsletters and individual letter drops to neighbouring residents along the key transport routes for the Project (in particular Arumpo Road). • Provision of a website providing details of the status of works and contact details for complaints or enquiries. • Provide key contact personnel and contact details, including out of hours contact information to residents, schools, public activities and business operating alongside the local route. • Neighbours of the wind farm will be consulted and notified regarding the timing of major deliveries which may require additional traffic control and disrupt access.	Prior to construction	Appendix 12 of the EIS and EIS Section 6.8
Traffic	TT03	The proposed use of OSOM vehicles for the Project will require the obtainment of suitable permits from the National Heavy Vehicle Regulator (NHVR). This replaces the approvals that were previously granted from Transport for NSW and councils. Applications are to be submitted to the NHVR, which identify the proposed OSOM loads, vehicle combinations and transport routes.	Prior to and during construction	Appendix 12 of the EIS and EIS Section 6.8

Aspect	ID #	Mitigation and/or Management Measure	Timing	Relevant EIS Section/Appendix
Traffic	TT04	In addition to the required permits, it is proposed that a detailed Traffic Management Plan (TMP) be developed for the Project as part of the Construction Traffic Management Plan (CTMP) or the decommissioning management plan that should be developed before construction or decommissioning commences. These plans will be prepared in consultation with relevant roads authorities.	Prior to construction and decommissioning	Appendix 12 of the EIS and EIS Section 6.8

Traffic	TT05	This TMP will provide details of the management measures to be implemented to govern the required Oversized and over mass (OSOM) vehicle movements for the Project. This TMP should include, but not be limited to:
		• Procedures for escorts of OSOM vehicles.
		• Traffic control plans for temporary road closures to allow vehicles to cross to the other side of the carriageway where required.
		• Safe work methods and strategies for working on roadways.
		• Indicative OSOM haulage schedule, including dates and times for transporting loads.
		• Location of suitable rest stops and vehicle layover areas along the proposed transport routes.
		• Communication strategy to affected communities.
		• Notification and consultation of key stakeholders including:
		  ○ Police and emergency services.
		  ○ Local Councils along the route.
		  ○ Public and school bus operators that may be affected.
		• Advertising in local newspaper and media releases.
		• Contact details of foreman or project manager throughout operations to be shared with emergency services and road authorities.
			Prior to construction and decommissioning	Appendix 12 of the EIS and EIS Section 6.8

Aspect	ID #	Mitigation and/or Management Measure	Timing	Relevant EIS Section/Appendix
		• Timing of operations and measures to avoid commuter peaks and school peaks through populated areas where practicable. • Consideration of cumulative impacts of other projects along the route, based on updated information that is available at that time. • Identification of layby areas for driver breaks and co-ordination of OSOM on site arrivals.		
Traffic	TT06	A Driver Code of Conduct will be implemented for all phases of the Project. The purpose of the Driver Code of Conduct is to minimise the impact of individual driver behaviours on all users of the public roads forming part of the site access routes. The Driver Code of Conduct outlines acceptable behaviour for all vehicle drivers in connection with the Project, including: • General requirements (e.g. site induction requirements). • Travelling speeds and safe driving practices, particularly through residential areas and school zones. • Fatigue management. • Adherence to designated transport routes and heavy vehicle noise. • Public complaint resolution and penalties and disciplinary action.	At all times during the carrying out of the development	Appendix 12 of the EIS and EIS Section 6.8
Traffic	TT07	Prior to involvement in the Project, vehicle drivers will be required to read the Driver Code of Conduct and acknowledge their compliance with it throughout their involvement in the Project. The expectations of the Driver Code of Conduct will be established in the Project induction and will be reiterated through pre-starts. Heavy vehicle haulage routes will be communicated to haulage contractors during the procurement stage and requirements of the Drivers Code of Conduct, route use and compliance included in their contracts.	At all times during the carrying out of the development	Appendix 12 of the EIS and EIS Section 6.8

Aspect	ID #	Mitigation and/or Management Measure	Timing	Relevant EIS Section/Appendix
Traffic	TT08	The Driver Code of Conduct includes an element of fatigue management. This includes the requirements for drivers on the Project to manage their fatigue, be suitably rested and for operators of heavy vehicles to comply with the Chain of Responsibility legal requirements under the National Heavy Vehicle Law (Heavy Vehicle (Adoption of National Law) Act 2013). The fatigue management standards, including those outlined in the Chain of Responsibility, will be consistent with the standards outlined in the Fatigue Management Plan.	At all times during the carrying out of the development	Appendix 12 of the EIS and EIS Section 6.8
Traffic	TT09	The proposed site access points provide good access and egress around the site for emergency services. No additional emergency access points are expected to be required proposed.	At all times during the carrying out of the development	Appendix 12 of the EIS and EIS Section 6.8
Traffic	TT10	In addition to the external network, it is recommended that mitigation measures targeted at safety and reducing the impact of Project traffic also be implemented for the on-site, internal vehicle circulation facilities. Such measures could include: • On-site speed limits / restrictions along internal access tracks. • Appropriate dust suppression measures. • Implementation of condition inspection and maintenance program for on-site access tracks to ensure safe for use by Project traffic. • Completion of all loading and unloading movements to occur within the designated work areas. No access track area or external streets or roads are to be used for material storage at any time. • Sufficient car parking is to be provided on-site to ensure vehicles do not park on the surrounding road network.	At all times during the carrying out of the development	Appendix 12 of the EIS and EIS Section 6.8

Aspect	ID #	Mitigation and/or Management Measure	Timing	Relevant EIS Section/Appendix
		• All car parking and loading areas to be designed in accordance with the relevant Australian Standard (2890 series) and Council requirements.		
Traffic	TT11	Under the safe systems approach road safety is generally improved by focussing on Safe Roads, Safe People, Safe Vehicles and Speed Management.	At all times during the carrying out of the development	Appendix 12 of the EIS and EIS Section 6.8
Traffic	TT12	Contractors are to ensure that all vehicles used are road worthy and in good working condition with lights, brakes, tire pressure etc.	At all times during the carrying out of the development	Appendix 12 of the EIS and EIS Section 6.8
Traffic	TT13	Safe Road Use can be achieved by education of workers and communicating policies of the work site. Worker site induction should include driver education of the local road conditions and an adoption of a "drivers code of conduct". This should include: • Driving to the conditions on unsealed roads. • Avoid speeding and other dangerous behaviour. • Identification and communication of known road crash cluster locations. • Identification and warning of when roads may be affected by black ice, road damage (potholes) and incidents. • A drug and alcohol policy to reduce incidents of drunk and drug driving. • Additional caution of wildlife when driving at dawn and dusk. • Measures to reduce the risk of workers driving while tired. • Training drivers to respect private property and farm gates.	At all times during the carrying out of the development	Appendix 12 of the EIS and EIS Section 6.8

Aspect	ID #	Mitigation and/or Management Measure	Timing	Relevant EIS Section/Appendix
Traffic	TT114	The proposed use of shuttle bus services for off-site workers would reduce the number of workers driving from the site when tired, and the provision of these services for off-site workers will be investigated. However, as off-site workers (approximately 25% off total construction workforce) are likely be dispersed around the surrounding localities, it is likely that some workers will need to travel to site independently.	Construction and Decommissioning	Appendix 12 of the EIS and EIS Section 6.8
Traffic	TT15	As part of managing the Project, workers would be required to drive to the conditions, respect speed limits, and abide by the Drivers Code of Conduct	At all times during the carrying out of the development	Appendix 12 of the EIS and EIS Section 6.8
Traffic	TT16	It is recognised that the Project may have an impact on sensitive land uses such as schools and residential precincts within townships along the identified OSOM haulage and material delivery routes. To minimise the impacts on schools it is recommended that temporary road closures for OSOM movements should be avoided during school peaks. To this end vehicle layovers should be identified along the proposed haulage routes to allow vehicles to wait until appropriate times for travel.	Construction	Appendix 12 of the EIS and EIS Section 6.8
Traffic	TT17	Speed reductions, use of fog lights during periods of low visibility, cessation of work and site shutdowns will be implemented as required during periods of adverse weather.	At all times during the carrying out of the development	Appendix 12 of the EIS and EIS Section 6.8
Water	WR01	For the construction phase of the Project, measures are to be captured in the CEMP. This would include the preparation of a Construction Soil Water Management Plan (CSWMP) and Erosion and Sediment Control Plan (ESCP).	Construction	Appendix 13 of the EIS and EIS Section 6.9

Aspect	ID #	Mitigation and/or Management Measure	Timing	Relevant EIS Section/Appendix
Water	WR02	For the operational phase of the Project, the measures outlined are to be documented in the Bush Fire and Emergency Management Operations Plan (BFEMOP) and in the Operational Environmental Management Plan (OEMP). The OEMP will address potentially adverse impacts on the receiving environment surface water quality and flooding during the operational phase. The BFEMOP will outline the flood hazards, evacuation and warning procedures to ensure the safety of all onsite.	Operation	Appendix 13 of the EIS and EIS Section 6.9
Water	WR03	The CSWMP and ESCP should be amended and incorporated into a Decommissioning and Rehabilitation Management Plan.	Prior to decommissioning	Appendix 13 of the EIS and EIS Section 6.9
Water	WR04	Maintaining the natural state of the drainage flow paths whenever possible. Internal access tracks, where crossing waterways or streams, will be designed for 10% AEP design flow and may include compacted rock causeways to provide low maintenance access with limited impact on the waterway or culvert structures.	At all times during the carrying out of the development	Appendix 13 of the EIS and EIS Section 6.9
Water	WR05	The design and construction of cable crossings and all internal access tracks crossing waterways within the proposed disturbance footprint should be generally in accordance with the Guidelines for controlled activities on waterfront land – riparian corridors (Guidelines for watercourse crossings on waterfront land and Guidelines for laying pipes and cables in watercourses on waterfront land).	Prior to construction	Appendix 13 of the EIS and EIS Section 6.9
Water	WR06	A CSWMP will be prepared to outline measures to manage soil and water impacts associated with the construction and decommissioning works.	Prior to construction	Appendix 13 of the EIS and EIS Section 6.9
Water	WR07	Creation of catch/diversion drains and sediment fences at the downstream boundary of construction activities where practicable to support containment of sediment-laden runoff.	Construction	Appendix 13 of the EIS and EIS Section 6.9

Aspect	ID #	Mitigation and/or Management Measure	Timing	Relevant EIS Section/Appendix
Water	WR08	Erosion and sediment control measures will be implemented and maintained at all work sites in accordance with the principles and requirements in Managing Urban Stormwater – Soils and Construction, Volume 1 and Volume 2D of Blue Book.	At all times during the carrying out of the development	Appendix 13 of the EIS and EIS Section 6.9
Water	WR09	Measures to minimise/manage erosion and sediment transport both within the construction footprint and offsite including requirements for the preparation of (ESCP) for all progressive stages of construction and decommissioning.	Construction and Decommissioning	Appendix 13 of the EIS and EIS Section 6.9
Water	WR10	The best practice principles for stormwater and sediment control outlined in the Managing Urban Stormwater Blue Book guidelines will be incorporated into the design, construction and operation phases as part of a SWMP and ESCP.	At all times during the carrying out of the development	Appendix 13 of the EIS and EIS Section 6.9
Water	WR11	BESS components will be located on hardstand areas and will be aligned with local overland flow paths to prevent flows being redirected which could lead to localised increased in flood level and higher risk of scour and erosion.	At all times during the carrying out of the development	Appendix 13 of the EIS and EIS Section 6.9
Water	WR12	Inspection and monitoring requirements including receiving water quality monitoring.	Operation	Appendix 13 of the EIS and EIS Section 6.9
Water	WR13	Maintenance of stormwater infrastructure including any stormwater treatment devices (e.g. bioretention basins and culverts (e.g. clearing debris).	At all times during the carrying out of the development	Appendix 13 of the EIS and EIS Section 6.9
Water	WR14	Maintenance of suitable ground cover and grassed table drains near access tracks to minimise the potential for erosion and export of sediment.	At all times during the carrying out of the development	Appendix 13 of the EIS and EIS Section 6.9

Water	WR15	Flooding measures: • During construction design flood risk will be considered and include, as a minimum, a review of temporary infrastructure layouts and arrangements to a) avoid and/or minimise obstruction of overland flow paths, b) limit the extent of flow diversion, c) include stormwater management controls to avoid/minimise the impact of flooding, and d) consider measures to mitigate alterations to local runoff conditions due to on-site works and activities. • During construction, design stockpiles would be located outside areas anticipated to flood and experience velocities above 0.5 m/s. Where reasonable/feasible located outside the mapped 10% AEP flood extents. • Based on the Project design utilised for this assessment, temporary construction compounds, laydown areas, concrete batching plants and the TWA Facility have been located away from areas where depths of flow are deeper than 250mm during the modelled 1% AEP event. This mitigation will persist if any future design revisions occur. • Flood emergency management measures for the construction phase would be prepared and included in applicable environmental and safety management documentation i.e. the CEMP, CSWMP and ESCP noted above, as relevant. • As a minimum this would include identification of flood related risks and their management, and processes to monitor and communicate weather warnings. In this regard, construction staff will have access to the following facilities for early severe weather warnings: The Bureau of Meteorology's "MetEye" and The Bureau of Meteorology's "RSS feeds". Radio and Bureau of Meteorology information will be reviewed frequently for potential major storm events and to ensure on-site personnel and visitors are aware of potential flooding events and road closures.	At all times during the carrying out of the development	Appendix 13 of the EIS and EIS Section 6.9

Aspect	ID #	Mitigation and/or Management Measure	Timing	Relevant EIS Section/Appendix
		• Flood emergency management measures for the operational phase would be prepared and included in applicable environmental and safety management documentation i.e. the BFEMOP and OEMP noted above, as relevant. In this regard, operations staff will have access to the following facilities for early severe weather warnings: The Bureau of Meteorology's "MetEye" and The Bureau of Meteorology's "RSS feeds". Radio and Bureau of Meteorology information will be reviewed frequently for potential major storm events and to ensure on-site personnel and visitors are aware of potential flooding events and road closures • Evacuation routes will be designed during the detailed design phase and will consider zones of flood hazard. These routes would be included in applicable environmental and safety management documentation i.e. the BFEMOP and OEMP noted above, as relevant. • Flood behaviour as a result of the Project would be confirmed during detailed design, inclusive of climate change. In this regard foundations for the WTGs and transmission lines, their footings are located away from areas of erosive behaviour such as flood depths of 0.3 m and flow velocities greater than 1.5 m/s. Detailed design of the Project will consider the results of the 1% AEP scenario. • Based on the Project design utilised for this assessment, this mitigation is achieved and should persist if any future design revisions occur.		

Aspect	ID #	Mitigation and/or Management Measure	Timing	Relevant EIS Section/Appendix
Water	WR16	Stream stability, riparian health and fish passage measures: • Infrastructure with the potential to cause pollution to watercourses in the event of flooding, such as inverters and battery storage, will be located with a minimum 300 mm freeboard above the maximum 1% AEP flood level. Given the shallow depths across the Project Area, raising these small fill pads is highly unlikely to result in any adverse impacts offsite. • No sensitive infrastructure (e.g., substation, BESS) will be placed within 20 m of any Strahler 3 or above order streams. Sensitive infrastructure will be placed outside the 0.2% AEP flood extent with a minimum 500mm freeboard to the 1% AEP flood level. Based on the Project design utilised for this assessment, this mitigation is achieved and should persist if any future design revisions occur. • Controls for receiving watercourses which may include designation of 'no go' zones for construction plant and equipment.	At all times during the carrying out of the development	Appendix 13 of the EIS and EIS Section 6.9
Water	WR17	A water sourcing and monitoring strategy to manage potential availability impacts on downstream water users and ensure compliance with legislation relating to water extraction.	At all times during the carrying out of the development	Appendix 13 of the EIS and EIS Section 6.9
Water	WR18	Watercourse crossings are to achieve flood immunity requirements as follows: • Adequately sized pipe drainage and/or floodways are to be provided to allow for the conveyance of overland flow under and/or across the access tracks. • Adequate erosion protection across and downstream of the access track crossings should be provided.	At all times during the carrying out of the development	Appendix 13 of the EIS and EIS Section 6.9

Aspect	ID #	Mitigation and/or Management Measure	Timing	Relevant EIS Section/Appendix
		• An energy dissipator should be included at the pipe outlet or downstream of the floodway to prevent potential erosion undermining the pipe/culvert and batters. • Planned works are to be scheduled for forecasted dry weather periods.		
Water	WR19	All reasonable and feasible care will be taken to avoid damage to known groundwater bores within the Project Area.	At all times during the carrying out of the development	Section 4.2.19 of the Submissions Report
Water	WR20	During detailed design, Spark Renewables will undertake further flooding assessment in consultation with CPHR. This will include: • Providing additional detail on the loss values adopted from the hydrologic analysis. The additional detail will describe how the loss values adopted are consistent with Australian Rainfall and Runoff (AR&R) • Defining and mapping the flood function categories for both the existing and proposed condition scenarios. Conducting hydraulic modelling that includes the detailed design of the proposed project infrastructure to ensure the impact of the project on flood behaviour and the flood risks to on-site infrastructure and existing off-site infrastructure are adequately addressed.	Prior to construction	Section 4.2.6 of the Submissions Report
Water	WR21	Spark Renewables will actively engage with Wentworth Shire Council and the NSW SES to demonstrate that emergency management matters have been discussed and supported. This consultation will commence after the matters outlined in WR20 above have been addressed and will inform the development of a site-specific flood emergency response plan (i.e. the BFEMOP).	Prior to construction	Section 4.2.6 of the Submissions Report

Aspect	ID #	Mitigation and/or Management Measure	Timing	Relevant EIS Section/Appendix
Soil, Land and Agricultural	SAL01	During the life of the Project, agricultural land use will continue within the Project Area outside of the Disturbance Footprint.	At all times during the carrying out of the development	Appendix 14 of the EIS and EIS Section 6.10
Soil, Land and Agricultural	SAL02	At the time of decommissioning, agricultural land use will be re-established over all land removed from agriculture (unless otherwise agreed with the landholder and/or regulatory authorities).	Decommissioning	Appendix 14 of the EIS and EIS Section 6.10
Soil, Land and Agricultural	SAL03	At the time of decommissioning, the Project Area will be returned to an agricultural productivity that is approximately equivalent of pre-Project status.	Decommissioning	Appendix 14 of the EIS and EIS Section 6.10
Soil, Land and Agricultural	SAL04	All soil that is proposed to be disturbed during the Project will be handled in accordance with the strategy outlined in Section 6.2.1 of the SLAIA (Appendix 14) and a site Soil Stripping and Management Plan prepared for the Project that includes soil management measures relating to stripping, stockpiling, reuse, and sourcing, as required. This will inform the CEMP, OEMP and a DRP.	At all times during the carrying out of the development	Appendix 14 of the EIS and EIS Section 6.10
Soil, Land and Agricultural	SAL05	All soil resources are to be managed throughout construction, operation and decommissioning phases of the Project in accordance with an ESCP which should include recommendations outlined in Section 6.2.1 of the SLAIA (Appendix 14).	At all times during the carrying out of the development	Appendix 14 of the EIS and EIS Section 6.10
Soil, Land and Agricultural	SAL06	All remaining infrastructure to be capped with a suitable depth of soil at the time of decommissioning with material of suitable texture and preparation to mitigate long term wind erosion and restore to pre-disturbance LSC classes (generally 0.5m).	Decommissioning	Appendix 14 of the EIS and EIS Section 6.10
Soil, Land and Agricultural	SAL07	At the time of decommissioning, disturbed land will be returned to an equivalent LSC class following the end of life for the Project, through site rehabilitation and good soil management practices as outlined in Section 6.2 of the SLAIA (Appendix 14).	Decommissioning	Appendix 14 of the EIS and EIS Section 6.10

Aspect	ID #	Mitigation and/or Management Measure	Timing	Relevant EIS Section/Appendix
Soil, Land and Agricultural	SAL08	All soil resources are to be managed throughout construction, operation and decommissioning phases of the Project in accordance with an ESCP which should include recommendations outlined in Section 6.2.1 of the SLAIA (Appendix 14).	At all times during the carrying out of the development	Appendix 14 of the EIS and EIS Section 6.10
Soil, Land and Agricultural	SAL09	Agriculture infrastructure and property improvements will be retained and maintained to accommodate continued agricultural operations within the Project Area.	At all times during the carrying out of the development	Appendix 14 of the EIS and EIS Section 6.10
Soil, Land and Agricultural	SAL10	Pest species will be managed in accordance with measures outlined in Section 5.4.1 of the SLAIA (Appendix 14), and a Weed and Pest Management Plan prepared for the Project.	At all times during the carrying out of the development	Appendix 14 of the EIS and EIS Section 6.10
Soil, Land and Agricultural	SAL11	Biosecurity will be managed in accordance with measures outlined in Section 5.4.2 of the SLAIA (Appendix 14) and an Agricultural Biosecurity Management Plan prepared for the Project.	At all times during the carrying out of the development	Appendix 14 of the EIS and EIS Section 6.10
Air Quality	AQ01	Develop and implement a stakeholder communications plan that includes community engagement before work commences on site.	At all times during the carrying out of the development	Appendix 15 of the EIS and EIS Section 6.11
Air Quality	AQ02	Display the name and contact details of person(s) accountable for air quality and dust issues on the Project Boundary and the Project access points.	At all times during the carrying out of the development	Appendix 15 of the EIS and EIS Section 6.11
Air Quality	AQ03	As part of the CEMP, detail the air quality control measures and procedures to be undertaken during construction, including: • Air quality and dust management objectives that are consistent with relevant regulatory authority guidelines. • Identification of potential sources of dust. • Mitigation measures to minimise dust impacts on sensitive receptors (including but not necessarily limited to AQM05 to AQM11 below).	Construction	Appendix 15 of the EIS and EIS Section 6.11

Aspect	ID #	Mitigation and/or Management Measure	Timing	Relevant EIS Section/Appendix
		• Contingency plans to be implemented in the event of non-compliances and/or complaints about dust.		
Air Quality	AQ04	Maintain regular communications with Iluka Resources Ltd in regard to Euston Critical Minerals Project to ensure plans are co-ordinated, dust and particulate matter emissions are minimised, and interactions of off-site transport/deliveries which might be using the same strategic road network routes are considered. Similarly, regular communications with Squadron Energy in regard to Gol Gol Renewable Energy Hub are also desirable.	At all times during the carrying out of the development	Appendix 15 of the EIS and EIS Section 6.11
Air Quality	AQ05	Areas of exposed surface are to be minimised throughout the construction site planning and programming, to reduce the area of potential construction dust emission sources.	Pre-construction, Construction and Decommissioning	Appendix 15 of the EIS and EIS Section 6.11
Air Quality	AQ06	Control measures, such as compaction stabilisation or covering will be implemented in order to minimise dust from stockpile sites.	Construction and Decommissioning	Appendix 15 of the EIS and EIS Section 6.11
Air Quality	AQ07	Dust suppression measures, such as the use of water carts or soil binders, will be used in any unsealed surfaces and other exposed areas as required.	Pre-construction, Construction and Decommissioning	Appendix 15 of the EIS and EIS Section 6.11
Air Quality	AQ08	Further stabilisation should be considered for high-use access tracks, particularly those in closer proximity to sensitive receptors such as residential dwellings. Stabilisation may include sealing or the use of lower silt content material such as gravel.	At all times during the carrying out of the development	Appendix 15 of the EIS and EIS Section 6.11
Air Quality	AQ09	All trucks should cover their loads when transporting materials that are potential sources of wind-blown dust, to and from the Project Area.	At all times during the carrying out of the development	Appendix 15 of the EIS and EIS Section 6.11
Air Quality	AQ10	Ensure bulk cement and other fine powder materials are delivered in enclosed tankers and stored in silos with suitable emission control systems to prevent escape of material and overfilling during delivery.	Construction and Decommissioning	Appendix 15 of the EIS and EIS Section 6.11

Aspect	ID #	Mitigation and/or Management Measure	Timing	Relevant EIS Section/Appendix
Air Quality	AQ11	Activities that generate dust will be avoided or modified during high wind periods.	At all times during the carrying out of the development	Appendix 15 of the EIS and EIS Section 6.11
Air Quality	AQ12	Work activities will be reviewed if the dust suppression measures are not adequately restricting dust generation.	At all times during the carrying out of the development	Appendix 15 of the EIS and EIS Section 6.11
Air Quality	AQ13	Ensure rumble grids and wheel washes are placed at all site exit points and that gravel or sealed surfaces are maintained between the wheel wash and the exit to avoid recontamination of tyres.	At all times during the carrying out of the development	Appendix 15 of the EIS and EIS Section 6.11
Air Quality	AQ14	Construction plant and equipment will be maintained in good working condition to limit impacts on air quality.	At all times during the carrying out of the development	Appendix 15 of the EIS and EIS Section 6.11
Air Quality	AQ15	Where practicable, vehicles will be fitted with pollution reduction devices and switched off when not in use.	At all times during the carrying out of the development	Appendix 15 of the EIS and EIS Section 6.11
Economic	ECO01	Prior to commencing construction, Spark Renewables will prepare an AES for the Project in consultation with relevant stakeholders.	Prior to construction	Appendix 22, Appendix 11 of the EIS Section 6.7 and Section 12 of the EIS.
Economic	ECO02	Spark Renewables will develop a Community Shared Benefit Strategy which will include details of any Planning Agreement with Wentworth Shire other community benefit initiatives.	Prior to construction	Appendix 22, Appendix 11 of the EIS, Section 6.7 and Section 12 of the EIS
Preliminary Hazard Assessment	PHA01	The BESS will be tested in accordance with UL9540A.	Construction	Appendix 16 of the EIS and EIS Section 6.13.1

Aspect	ID #	Mitigation and/or Management Measure	Timing	Relevant EIS Section/Appendix
Preliminary Hazard Assessment	PHA02	The BESS will be installed in accordance with manufacturer and UL9540A report recommended clearances based on testing.	Construction	Appendix 16 of the EIS and EIS Section 6.13.1
Preliminary Hazard Assessment	PHA03	The BESS will be installed with fire protection systems specified by the manufacturer and UL9540A report.	Construction	Appendix 16 of the EIS and EIS Section 6.13.1
Preliminary Hazard Assessment	PHA04	Prior to the commencement of construction in the relevant stage of the Project, detailed design will be undertaken to validate the BESS can be installed in the Project Area whilst meeting the recommended clearances.	Prior to construction	Appendix 16 of the EIS and EIS Section 6.13.1
Preliminary Hazard Assessment	PHA05	UL testing information shall be made available to the certifying authority. It is noted that a confidentiality agreement may be required.	Construction	Appendix 16 of the EIS and EIS Section 6.13.1
Preliminary Hazard Assessment	PHA06	The vent covers of the BESS shall be constructed of non-combustible material.	Construction	Appendix 16 of the EIS and EIS Section 6.13.1
Preliminary Hazard Assessment	PHA07	The vents shall not be located above battery packs within the BESS container.	At all times during the carrying out of the development	Appendix 16 of the EIS and EIS Section 6.13.1
Bushfire	BF01	A BFEMOP will be prepared in consultation with the RFS, FRNSW and NPWS which will be implemented over the life of the Project. The purpose of the BFEMOP is to identify all relevant risks and mitigation measures associated with the construction, operation and decommissioning of the Project. This will include details regarding: • measures to prevent or mitigate fires igniting • work that should not be carried out during total fire bans • availability of fire-suppression equipment, access and water • storage and maintenance of fuels and other flammable materials	At all times during the carrying out of the development	Appendix 17 of the EIS and EIS Section 6.13.2

Aspect	ID #	Mitigation and/or Management Measure	Timing	Relevant EIS Section/Appendix
		• procedures to notify the local NSW RFS Fire Control Centre for any works that have the potential to ignite surrounding vegetation, proposed to be carried out during a bush fire danger period to ensure weather conditions are appropriate • appropriate bush fire emergency management planning, including an access protocol to inform NPWS, Australian Wildlife Conservancy (AWC) and the RFS of any temporary disruptions or change to access arrangements to Mallee Cliffs National Park through the life of the project, developed to the satisfaction of NPWS. The BFEMOP will be prepared in accordance with HIPAP No. 1 prior to construction. A copy of the BFEMOP will be provided to the Local Emergency Management Committee for its information prior to the operation of the Wind Turbine Generators and/or occupation of the Temporary Workers Accommodation.		
Bushfire	BF02	The BFEMOP will detail emergency response procedures to facilitate aerial firefighting operations, including protocols for: • communications with relevant fire and land management agencies • ensuring access is available to the Project Area by emergency services response for on-ground firefighting operations • ensuring WTGs are shut down immediately during emergency operations (where possible, blades will be stopped in the 'Y' or 'rabbit ear' position).	At all times during the carrying out of the development	Appendix 17 of the EIS and EIS Section 6.13.2

Aspect	ID #	Mitigation and/or Management Measure	Timing	Relevant EIS Section/Appendix
Bushfire	BF03	The BFEMOP will reflect Spark Renewables' commitments to bushfire training and the provision of firefighting equipment for personnel, including: • training for all on-site personnel regarding bush fire response procedures • firefighting training for operational workers • fitting of basic firefighting equipment in operational vehicles.	At all times during the carrying out of the development	Appendix 17 of the EIS and EIS Section 6.13.2
Bushfire	BF04	Sleeping accommodation within the TWA facility will comply with Sections 3 and 5 (BAL 12.5) of Australian Standard AS3959-2018 'Construction of buildings in Bush Fire-prone areas', except as modified by Section 7.5 of PBP (2019).	Construction	Appendix 17 of the EIS and EIS Section 6.13.2
Bushfire	BF05	Essential equipment will be designed and housed in such a way as to minimise the impact of bushfires on the capabilities of the infrastructure during bushfire emergencies. It will also be designed and maintained so that it will not serve as a bushfire risk to surrounding bush.	At all times during the carrying out of the development	Appendix 17 of the EIS and EIS Section 6.13.2
Bushfire	BF06	Fire protection equipment within buildings including fire extinguishers, fire hose reels, evacuation signage, first aid kits, etc will be available at all times and serviced /maintained regularly.	At all times during the carrying out of the development	Appendix 17 of the EIS and EIS Section 6.13.2
Bushfire	BF07	The O&M site offices will be ember screened, with a 20 m APZ (refer BF11 and BF12 for other APZ commitments). The BFEMOP will include a protocol to shut all windows & doors in a bush fire emergency.	At all times during the carrying out of the development	Appendix 17 of the EIS and EIS Section 6.13.2
Bushfire	BF08	A sprinkler system (i.e. metal garden sprinklers on the ground) will be considered for the O&M APZs, including wetting the walls of the building. This would provide limited fire suppression in the event of a fire.	At all times during the carrying out of the development	Appendix 17 of the EIS and EIS Section 6.13.2

Aspect	ID #	Mitigation and/or Management Measure	Timing	Relevant EIS Section/Appendix
Bushfire	BF09	A petrol or diesel or solar powered fire fighting pump (with battery storage backup) and minimum 30 m hose reel with a steel nozzle will be purchased and stored in an ember proofed housing. This mobile pump can be used on the back of a 4WD or similar vehicle to fight grassland fires/spot fires, and for pumping water from water tank(s).	At all times during the carrying out of the development	Appendix 17 of the EIS and EIS Section 6.13.2
Bushfire	BF10	For the construction and decommissioning phases of the Project, the following measures will be implemented: • provide good access i.e. construct access roads prior to WTG and ancillary infrastructure installation as described under BF15 below, and then decommission access roads after WTG and ancillary infrastructure removal (except where required for farming operations) • install appropriate signage to assist emergency response crews • ensure any and all appropriate permits are issued as required • adhere to restrictions on total fire ban, or days of high fire danger • vehicles carry fire extinguishers or fire fighting equipment, where possible • emergency communications equipment is carried • vehicles will be selected with a preference for diesel and/or will utilise cleared tracks/internal roads to minimise likelihood of ignition • smoking is restricted to prescribed areas with suitable butt disposal • plant equipment and machinery is maintained to a suitable standard and cleaned to remove any accumulated flammable material • the 'Fires Near Me' app is utilised to understand proximal threat of fire.	Construction and decommissioning	Appendix 17 of the EIS and EIS Section 6.13.2

Aspect	ID #	Mitigation and/or Management Measure	Timing	Relevant EIS Section/Appendix
Bushfire	BF11	During construction and for the life of the Project, APZs will be established and maintained in accordance with Appendix 4 of PBP, 2019. APZs will be established to the following standards, as a minimum: • TWA – 25 m • O&M facilities – 20 m • WTGs, substations, switchyards and BESS – 10 m.	At all times during the carrying out of the development	Appendix 17 of the EIS and EIS Section 6.13.2
Bushfire	BF12	Additionally, Spark Renewables will maintain: • Clearance of all woody vegetation within two (2) m of power poles. • Clearance of all woody vegetation within three (3) m of transmission tower structures or 12 m from the centre of the tower (whichever is greater).	At all times during the carrying out of the development	Appendix 17 of the EIS and EIS Section 6.13.2
Bushfire	BF13	Water, electricity and gas will comply with Table 7.4a (where relevant) of PBP (2019).	At all times during the carrying out of the development	Appendix 17 of the EIS and EIS Section 6.13.2
Bushfire	BF14	A non-combustible dedicated water tank/s (minimum capacity 100,000 litre (l)) with Storz fitting will be provided on site. Dedicated fire fighting water supply from this tank is specifically for fire tanker refilling/on-site fire fighting. This Static Water Supply (SWS) will be placed in a location readily accessible by fire tanker (within the TWA facility or O&M compounds). The SWS will be signposted, and a minimum ten (10) m APZ will be established and maintained around it.	At all times during the carrying out of the development	Appendix 17 of the EIS and EIS Section 6.13.2
Bushfire	BF15	The internal road network will conform to PBP (2019). Specifically, internal roads will have: • minimum 4 m vertical clearance to any overhanging obstructions	At all times during the carrying out of the development	Appendix 17 of the EIS and EIS Section 6.13.2

Aspect	ID #	Mitigation and/or Management Measure	Timing	Relevant EIS Section/Appendix
		• minimum 4 m width with 1 m traversable shoulders, unsealed/sealed all weather traversable road with suitable load bearing capacity, drainage structures and feature crossings • a grade generally less than 100, noting short steep sections would be acceptable if sealed and <150 and then suitable cross fall of the road surface provided • two-way traffic flow (with capacity for passing and turning areas) which enables safe access & egress for emergency services and allow crews to work with equipment about the vehicle is to be provided by the proposed road system & APZs.		
Bushfire	BF16	A Fire Safety Study (FSS) will be developed in accordance with the requirements of the Hazardous Industry Planning Advisory Paper (HIPAP) No.2 and submitted to FRNSW for review. • The FSS is to be used to inform the design and as such it is FRNSW Position and that the FSS be developed to the satisfaction of FRNSW prior to any further submission being made to FRNSW; this includes: an Initial Fire Safety Report (IFSR) and / or Performance-Based Design Brief / Fire Engineering Brief Questionnaire (FEBQ). • The FSS will be prepared consistent with the FRNSW Fire Safety Guideline Technical Information – Large scale external lithium-ion battery energy storage systems – Fire safety study considerations.	Prior to construction of the BESS	Section 4.2.4 of the Submissions Report
Bushfire	BF17	An Emergency Services Information Package (ESIP) will be developed for the site in accordance with FRNSW fire safety guideline – Emergency services information package and tactical fire plans.	Prior to construction	Section 4.2.4 of the Submissions Report

Aspect	ID #	Mitigation and/or Management Measure	Timing	Relevant EIS Section/Appendix
Bushfire	BF18	An emergency responder's induction package is developed for the site in consultation with, and to the satisfaction of FRNSW. The package should inform first responders of site-specific features and safety measures to ensure they are able to undertake their duties effectively. The format of the induction package should be such that it can be readily shared across all agencies.	Prior to construction	Section 4.2.4 of the Submissions Report
Bushfire	BF19	Spark Renewables will engage directly with FRNSW by submitting all correspondence electronically to FireSafety@fire.nsw.gov.au and reference FRNSW file number FRN23/605. Note: Further information regarding FRNSW Meetings and FRNSW Written Reports can be found at the FRNSW Building Fire Safety Industry Portal.	At all times during the carrying out of the development	Section 4.2.4 of the Submissions Report
Bushfire	BF20	All Asset Protection Zones (APZ), temporary construction fencing and permanent security fencing will be contained wholly within the Project Area to ensure that access trails within Mallee Cliffs National Parks are maintained.	All times during the carrying out of the development	Section 4.2.15 of the Submissions Report
Electromagnetic Frequency	EMI01	Should any substantial changes to the WTG layout occur in the future (i.e. moving WTGs beyond approved micro-siting limits) potential interference to telecommunications services will be reviewed, in consultation with relevant stakeholders, as part of any future modification application. If impacts are identified as a result of future design changes the following conceptual avoidance, minimisation and/or mitigation options would be considered: • Modify the design to either relocate and/or remove wind turbines to avoid, minimise and/or mitigate any EMI issues and telecommunications impacts. • Monitoring telecommunications during construction, operational and/or decommissioning phases of the Project to confirm impacts.	At all times during the carrying out of the development	Appendix 18 of the EIS and EIS Section 6.13.3

Aspect	ID #	Mitigation and/or Management Measure	Timing	Relevant EIS Section/Appendix
		• Modify telecommunications transmission paths around wind turbines. • Modify existing telecommunications infrastructure to improve performance. • Where these options require future investigation, any interaction and/or cumulative impact as a result of the developments listed in the EMI report and this EIS (or any additional developments that have entered the public domain since) would be considered.		
Electromagnetic Frequency	BT01	Ensuring all WTGs are manufactured and certified to achieve relevant Australian and international safety standards (IEC 61400-23).	Construction	Appendix 18 of the EIS and EIS Section 6.13.3
Electromagnetic Frequency	BT02	Ensuring all WTGs are equipped with suitable measurement instrumentation that can detect and then respond to any rotor blade imbalances and shut down WTG if required.	Construction	Appendix 18 of the EIS and EIS Section 6.13.3
Electromagnetic Frequency	BT03	Ensuring all WTGs will be suitably managed and maintained according to industry best-practice standards and are subject to a regular and comprehensive maintenance and servicing regime.	Construction	Appendix 18 of the EIS and EIS Section 6.13.3
Electromagnetic Frequency	BT04	• Additionally, should any substantial changes to the WTG layout occur in the future (i.e. moving WTGs beyond approved micro-siting limits) blade throw risks will be reviewed and the following measures implemented as part of any future modification application: • Modify the design to either relocate and/or remove WTGs to avoid, minimise and/or mitigate any blade throw issues, risks and impacts. • Confirm during detailed design that any change in probability of fatality, and blade fragmentation and blade drop risk at FB2 (a farm building located within 400 m of T14, as seen in Figure 10 of	At all times during the carrying out of the development	Appendix 18 of the EIS and EIS Section 6.13.3

Aspect	ID #	Mitigation and/or Management Measure	Timing	Relevant EIS Section/Appendix
		Appendix 19), as a result of any relevant design modification (i.e. relocation of WTG near FB2) results in a risk and associated impact being maintained within suitable thresholds of acceptability.		
Electromagnetic Frequency	EMF01	Should any substantial changes to the WTG layout and associated electrical infrastructure occur in the future (i.e. moving WTGs beyond approved micro-siting limits) potential EMF impacts, however unlikely, will be reviewed. If impacts are identified as a result of future design changes the following conceptual avoidance, minimisation and/or mitigation options would be considered: • Confirm during detailed design that any change in EMF, as a result of any relevant design modification results in a risk and associated impact being maintained within suitable thresholds of acceptability. • If required, modify the design to either relocate and/or remove infrastructure to avoid, minimise and/or mitigate any EMF issues, risks and impacts. Where these options require future investigation, any interaction and/or cumulative impact as a result of the developments listed in this EIS (or any additional developments that have entered the public domain since) would be considered.	At all times during the carrying out of the development	Appendix 18 of the EIS and EIS Section 6.13.3
Electromagnetic Frequency	EMF02	Spark Renewables will engage with NPWS post-construction if any issues arise with RF links, mobile radio performance, or NPWS communication systems (including VHF simplex channels and future UHF PSN Trunking services which are potentially associated with the Project.	During operations	Section 4.2.14 of the Submissions Report

Aspect	ID #	Mitigation and/or Management Measure	Timing	Relevant EIS Section/Appendix
Aviation	AV01	Details of WTGs 100 m or more above ground level (AGL) will be reported to CASA as soon as practicable after forming the intention to construct or erect the proposed object or structure, in accordance with CASR Part 139.165(1)(2). The notification will be provided to CASA via email to Airspace.Protection@casa.gov.au.	Prior to construction of WTGs	Appendix F of the Submissions Report
Aviation	AV02	Final details of WTG coordinates and elevation will be provided to Airservices Australia at least two weeks prior to construction commencing, by submitting the form at this webpage: https://www.airservicesaustralia.com/wp-content/uploads/ATS-FORM-0085_Vertical_Obstruction_Data_Form.pdf to the following email address: vod@airservicesaustralia.com	Prior to construction of WTGs	Appendix F of the Submissions Report
Aviation	AV03	Any obstacles 100 m or more AGL (including temporary construction equipment) will be reported to Airservices Australia NOTAM office until they are incorporated in published operational documents. With respect to crane operations during the construction of the Project, a notification to the NOTAM office may include, for example, the following details: a. The planned operational timeframe and maximum height of the crane; and b. Either the general area within which the crane will operate and/or the planned route with timelines that crane operations will follow.	Prior to construction	Appendix F of the Submissions Report
Aviation	AV04	Details of the wind farm will be provided to local and regional aircraft operators prior to construction in order for them to consider the potential impact of the wind farm on their operations.	Prior to construction	Appendix F of the Submissions Report

Aspect	ID #	Mitigation and/or Management Measure	Timing	Relevant EIS Section/Appendix
Aviation	AV05	To facilitate the flight planning of aerial application operators, details of the Project, including the 'as constructed' location and height information of WTGs and overhead transmission lines will be provided to landowners so that, when asked for hazard information on their property, the landowner may provide the aerial application pilot with all relevant information. CASA recommends that the following Australian Standard be considered regarding overhead transmission lines: AS 3891.2, Air navigation — Cables and their supporting structures — Marking and safety requirements, Part 2: Low-level aviation operations.	Prior to construction	Appendix F of the Submissions Report
Aviation	AV06	Spark Renewables will obtain any necessary approvals from the operators of Mildura Airport and Wentworth Aerodrome for any procedures to be amended. Notification will be provided to the aerodrome operators a minimum of six (6) months prior to commencement of construction of WTGs or WMTs.	Prior to construction of WTGs or WMTs	Appendix F of the Submissions Report
Aviation	AV07	The rotor blades, nacelle and the supporting tower of the WTGs will be coloured low-reflective white or off-white, typical of most WTGs operational in Australia. No additional marking measures are required for WTGs.	During construction and operations	Appendix F of the Submissions Report
Aviation	AV08	It is not mandatory to mark the WMTs, however the following markings will be implemented in consideration of potential day VFR aerial work operations in accordance with NASF Guideline D: a. Obstacle marking for at least the top 1/3 of the mast and be painted in alternating contrasting bands of colour b. Marker balls or high visibility flags or high visibility sleeves placed on the outside guy wires; and c. Guy wire ground attachment points in contrasting colours to the surrounding ground/vegetation	During construction and operations	Appendix F of the Submissions Report

Aspect	ID #	Mitigation and/or Management Measure	Timing	Relevant EIS Section/Appendix
Aviation	AV09	Providing micro-siting of WTGs is limited to within 100 m of the planned WTGs it is not likely to result in a change in the maximum overall blade tip height of the Project. Should any further change be required, supplementary aviation assessment would be required.	Prior to construction	Appendix F of the Submissions Report
Aviation	AV10	The risk assessment in the Aviation Impact Assessment will be reviewed: a. Prior to construction to ensure the regulatory framework has not changed b. Following any significant changes to the context in which the assessment was prepared c. Following any near miss, incident or accident associated with operations considered in this risk assessment.	At all times during the carrying out of the development	Appendix F of the Submissions Report
Aviation	AV11	Spark Renewables will ensure that: • Liaison with the relevant fire and land management agencies is ongoing and effective. • Access is available to the Project Area by emergency services response for on-ground firefighting operations. • Wind turbines are shut down immediately during emergency operations – where possible, blades should be stopped in the 'Y' or 'rabbit ear' position, as this positioning allows for the maximum airspace for aircraft to manoeuvre underneath the blades and removes one of the blades as a potential obstacle. • Obstacle lighting is installed as shown conceptually in Appendix G of the Submissions Report. • There are procedures in place to quickly activate obstacle lighting during a bushfire or fog event to increase the visibility of these obstacles to pilots.	At all times during the carrying out of the development	Appendix F and Appendix G of the Submissions Report

Aspect	ID #	Mitigation and/or Management Measure	Timing	Relevant EIS Section/Appendix
		• There are procedures in place to ensure obstacle lights always remain lit as indicated in the lighting management system in a fail-safe mode, and any disruption or outages are minimised to the extent practicable through documented contingency arrangements.		
Waste	W01	As part of the detailed design and construction phase a Waste Management Plan will be prepared which will include a detailed breakdown of waste types and quantities in accordance with relevant legislation and guidelines. • The Waste Management Plan will outline the measures and strategies to be implemented on site to manage, reuse, recycle and safely dispose of waste including: • separation and storage of recyclable and non-recyclable materials • reuse and collection/transportation of waste • procedures for tracking waste storage and disposal. The Waste Management Plan will be prepared in consultation with Wentworth Shire Council.	Prior to construction	EIS Section 6.14
Waste	W02	Spark Renewables has committed to develop and implement a detailed DRP for the Project in consultation with key stakeholders, to guide the decommissioning of the Project and the rehabilitation of the site and to mitigate any negative legacy impacts to the community. To cover any potential future shortfall in the decommissioning costs Spark Renewables will commit to the following conditions to be included in any development approval issued: • Undertake an annual assessment of the remaining life of the Project, starting in Year 15.	Prior to decommissioning	EIS Section 6.14

Aspect	ID #	Mitigation and/or Management Measure	Timing	Relevant EIS Section/Appendix
		• When it is determined that the remaining economic life of the Project is less than six (6) years, update the DRS to identify the expected decommissioning methodology and anticipated cost. • If a shortfall (cost) is identified, establish a dedicated decommissioning reserve fund to cover the decommissioning and rehabilitation cost of the Project. This reserve will be established out of operating cashflows, with an appropriate percentage of cash generated by the Project directed into this reserve.		
Mallee Cliffs National Park	MCNP01	Preparation of an Access Protocol to MCNP in consultation with NPWS and ensuring NPWS is also consulted with in the preparation of the BFEMOP.	Prior to construction	EIS Section 7.3.5.1
Resources	RES01	Spark Renewables will actively monitor the MinView map viewer at https://minview.geoscience.nsw.gov.au/ for mining title changes that may interact with the Project during detailed design. Should any relevant changes be identified, Spark Renewables will consult with the affected title holders and key Government agencies (DPHI and NSW Resources) prior to finalising the detailed design of the Project.	Prior to construction	Section 4.2.12 of the Submissions Report
Resources	RES02	Spark Renewables will: • Consider potential resource sterilisation during detailed design and in consultation with relevant title holders. • Seek to minimise adverse interactions with AL24 where practicable, including through: ○ Micro-siting of infrastructure; ○ Geotechnical investigation to ensure the stability of any WTGs within AL24 or in close proximity to the proposed mine footprint (e.g. WTGs 14 to 17).	Prior to construction	Section 5.1.4 of the Submissions Report

Aspect	ID #	Mitigation and/or Management Measure	Timing	Relevant EIS Section/Appendix
Crown Land	CL01	In the event that the conversion of the freehold title is not completed prior to the commencement of construction, Spark Renewables will obtain all necessary approvals and/or tenures prior to any access or works commencing. This will include seeking concurrence from Western Local Land Services for the clearing of native vegetation and construction of hardstands and access roads proposed for the Travelling Stock Reserve.	Prior to construction	Section 4.2.9 of the Submissions Report
Temporary Workers Accommodation (TWA)	TWA01	A medical centre or first aid room staffed by personnel with suitable first aid/medical training will be provided within the TWA. Spark Renewables will investigate additional measures to mitigate strain on local health services during detailed Project design. These measures may include: • Having a visiting GP/nurse or medic at the TWA facility • Provision of telehealth services for workers within the TWA.	During construction	Section 5.3.2.3 of the Submissions Report
TWA	TWA02	Workers using their own transport will be instructed to travel into and out of the TWA outside of AM and PM peak periods, including any ad-hoc trips to nearby towns.	Construction	Appendix J of the Submissions Report
TWA	TWA03	No sound amplification is permitted at the TWA outside of standard construction hours unless: • It is required for emergency announcements, or • It is inaudible at non-associated dwellings.	During pre-construction, construction	Appendix J of the Submissions Report

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