



Paling Yards Development Pty Ltd

Paling Yards Wind Farm

Social Impact Assessment

25 November 2022

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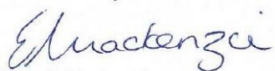
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25 November 2022

Paling Yards Wind Farm

Social Impact Assessment



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Acronyms and Abbreviations

Name	Description
AAS	Australian Anthropological Society
ABS	Australian Bureau of Statistics
AHIMS	Aboriginal Heritage Information Management System
CASA	Civil Aviation Safety Authority
CHAR	Cultural Heritage Assessment Report
CHMP	Cultural Heritage Management Plan
DP	Deposited Plan
DPE	NSW Department of Planning and Environment (formerly DPIE)
DPIE	NSW Department of Planning, Industry and Environment
EIS	Environmental Impact Statement
EPBC	Environment Protection and Biodiversity Conservation Act, 1999
GPG	Global Power Generation Australia
GPS	Global Positioning Systems
GW	Gigawatts
ha	Hectares

Name	Description
IAIA	International Association for Impact Assessment
km	Kilometres
kV	Kilovolts
LALC	Local Aboriginal Land Council
LGA	Local Government Area
m	Metres
MNES	Matters of National Environmental Significance
MW	Megawatts
NSW	New South Wales
OEH	Former Office of Environment and Heritage
PYWF	Paling Yards Wind Farm
RAPs	Registered Aboriginal Parties
REZ	Renewable Energy Zone
RSL	Returned Services League
SA1	ABS Statistical Area 1
SA EPA	South Australia Environmental Protection Agency
SEARs	Secretary's Environmental Assessment Requirements
SEIFA	ABS Socio-Economic Index for Areas
SEP	Stakeholder Engagement Plan
SISD	Safe Intersection Sight Distance
SSD	State Significant Development
TO	Traditional Owner
WHO	World Health Organisation
WTG	Wind turbine generator

1. INTRODUCTION

Global Power Generation Australia (GPG) is seeking State Significant Development (SSD) approval for the construction and operation of the proposed Paling Yards Wind Farm (PYWF or 'the Project'). The proposed Project is located across three landholdings (Mingary Park, Middle Station, Paling Yards and Hilltop) that comprise approximately 4,600 hectares (ha) located in the Central West region of NSW (the 'Project Area').

1.1 Project Proponent

The Project Proponent is Global Power Generation Australia (GPG), the Australian subsidiary of GPG Naturgy Group headquartered in Madrid. The GPG Naturgy Group currently have an installed capacity of 4.2 Gigawatts (GW) in wind, solar, hydro and thermal plants across nine countries. The GPG Naturgy Group was established in 2014 by the Naturgy Energy Group (with 75% ownership), and the Kuwait Investment Authority, through their subsidiary Wren House Infrastructure, (with 25% ownership). The GPG Naturgy Group currently employ approximately 500 staff globally.

The PYWF Project will be managed by a Special Purpose Vehicle under GPG known as the Paling Yards Development Pty Ltd (ABN: 25 653 388 473).

1.2 Project Description

The Project is situated within the Oberon Local Government Area (LGA) and is approximately 59 kilometres (km) south of Oberon and 60 km north of Goulburn. The closest localities are Porters Retreat (population of approximately 180) and Curraweela (population of approximately 320). The location of the Project is depicted in **Figure 1.1**.

The Project contains a proposed transmission line corridor approximately 9 km in length and 70 m in width, which crosses several parcels of land. The Project Area is heavily undulated with steep slopes present within the landscape. Abercrombie Road bisects the Project Area, linking the towns of Oberon and Goulburn and changing its name to Taralga Road at the crossing with the Abercrombie River to the south of the Project Area at the LGA boundary. Both of these roads are council-maintained. Several watercourses traverse the locality, principally the Abercrombie River that forms part of the southern boundary of the Project Area and flows west into the Lachlan River. The Project Area is adjacent to the Abercrombie River National Park, with the Wiabarborough Nature Reserve to the south east and Gurnang State Forest and Blue Mountains National Park further to the east / north east.

The Project has undergone several iterations since 2002. Under the first iteration (2002-2009) the Project was conceived by TME Australasia Pty Ltd in a joint venture with Gamesa Energy Australia Pty Ltd. At this time the initial site selection undertaken, based on, among other factors, the availability of wind resources, proximity to sensitive social and environmental land uses, and willingness of host landowners to establish the present site. The initial proposal was for 46 turbines of 67-68 m hub height. Under the second iteration (2009-2014) Union Fenosa Wind Australia took over the Project, progressing the design and developing an Environmental Impact Statement (EIS) for submission to the then NSW Department of Planning. This included face-to-face community consultation undertaken during May-June 2011 with neighbouring landowners and the preparation of a Social Impact Assessment by ERM. This iteration sought to include up to 59 turbines, but following stakeholder engagement this was revised to 55 turbines of 67-78 m hub height and rotors of 45 m diameter, resulting in a maximum tip height of 125 m. During 2014 the EIS was submitted and subsequently put on public display where it received a total of 24 submissions.

Under the third iteration, Project ownership transferred from Union Fenosa Wind Australia to GPG and work towards planning and development approvals recommenced during 2019. However, in June 2020, the application was withdrawn following further discussions with the (former) Department of Planning, Industry and Environment (DPIE). It was agreed that due to the advancements in the design of wind turbine technology and the amount of time that had passed since the original submission, a new application (the fourth and current Project iteration) would be submitted for assessment based on a revised design and current legislative requirements.

The new design includes a reduction in the number of wind turbines proposed, and comprises the following components, which are depicted in **Figure 1.1**:

- Up to 47 wind turbines, with capacity per unit of up to 6.1 MW, giving a total capacity of up to 287 MW;
- An approximate blade tip height of up to 240 m;
- Up to three wind monitoring masts fitted with associated instruments;
- Upgrades to existing local road infrastructure including several access points from Abercrombie Road;
- Internal unsealed tracks for vehicle access to turbines and infrastructure;
- An underground electrical and communication cable network linking turbines to each other and the proposed on-site substation;
- Up to three wind monitoring masts fitted with various instruments such as anemometers, wind vanes, temperature gauges and potentially other electrical equipment;
- A temporary batching plant to supply concrete for the foundations of the turbines and other associated structures;
- Obstacle lighting to selected turbines (if required);
- Removal of native vegetation and additional vegetation planting to provide screening (as required);
- A control room and facilities buildings;
- An on-site electrical substation and approximately 9 km of overhead powerlines (poles spacing 200-250 m) of up to 500 kV to connect to the Mt Piper to Bannanby 500 kV transmission line (including control room and other associated grid connection facilities; and
- All associated and ancillary uses and activities.

1.3 Legislative and Regulatory Context

1.3.1 Commonwealth Legislation

The *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) provides for the protection of nationally significant environments, including the implementation of measures consistent with Australia's international environmental responsibilities. To this end, the EPBC Act establishes a legal framework to protect and manage prescribed Matters of National Environmental Significance (MNES).

Under the EPBC Act, an action will need approval from the Minister for the Environment if the action has, will have, or is likely to have a significant impact on MNES. During the Project's first iteration, an EPBC referral was provided Federal Department of Environment and Heritage in 2005 and was determined not be a 'Controlled Action'. Desktop and field studies undertaken for subsequent Project iterations have not revealed additional MNES, however, the need for an additional referral under the present iteration will be confirmed through further field studies.

Commonwealth legislation does not include requirements or guidelines specific to conducting a SIA, these are provided under NSW legislation.

1.3.2 NSW Legislation

The Project has been determined to be a SSD under Division 4.7 of part 4 of the *Environmental Planning and Assessment Act, 1979* (EP&A Act). The Minister for Planning is the consent authority, who delegates the consent authority function to the Secretary of the NSW Department of Planning and Environment (DPE).¹ DPE guides all aspects of the EIS through the SEARs. The Project SEARs were issued on 09 March 2022. **Table 1.1** summarises the SEARs relevant to the SIA.

Table 1.1 SEARs Requirements Relevant to the SIA

Issue	SEARs Requirement	Relevance to the SIA
General Requirements	<p>The environmental impact statement (EIS) for the development must comply with the requirements in Part 8, Division 5 of the Environmental Planning and Assessment Regulation 2021 (the Regulation) and must have regard to the State Significant Development Guidelines.</p> <p>In particular, the EIS must include:</p> <ul style="list-style-type: none"> ■ a description of the existing environment likely to be affected by the development using sufficient baseline data; ■ an assessment of the likely impacts of all stages of the development (which is commensurate with the level of impact), including any cumulative impacts of the site and existing or proposed developments in the Oberon region, in accordance with the Cumulative Impact Assessment Guideline (DPIE, Nov 2021), taking into consideration any relevant legislation, environmental planning instruments, guidelines, policies, plans and industry codes of practice and including the NSW Wind Energy Guidelines for State Significant Wind Energy Development (2016); ■ a description of the measures that would be implemented to avoid, mitigate and/or offset the impacts of the development, including details of consultation with any affected landowners in relation to the development of mitigation measures, and any negotiated agreements with these landowners; and ■ a description of the measures that would be implemented to monitor and report on the environmental performance of the development, including adaptive management strategies and contingency measures to address residual impact. 	<p>Outlines the requirements for consideration in the SIA of the social baseline (Section 5); project phases and cumulative impacts; avoidance, mitigation and offset measures (Section 6); and monitoring measures (Section 7).</p>
Social impact	<p>Including an assessment of the social impacts in accordance with Social Impact Assessment Guideline (DPIE, Nov 2021) and consideration of construction workforce accommodation.</p>	<p>This standalone SIA addresses this SEARs requirement.</p>
Economic	<p>Including any benefits of the economic impacts or benefits of the project for the region and the State as a whole, including consideration of any increase in demand for community infrastructure services, and details of how the construction workforce will be managed to minimise local impacts, including a consideration of the construction workforce accommodation.</p>	<p>Gillespie Economics provided a standalone Economic Assessment, which informs the impact assessment in Section 6.</p>
Consultation	<p>During the preparation of the EIS, you must consult with the relevant local, State or Commonwealth Government authorities, service providers, community groups and affected landowners.</p> <p>The EIS must:</p> <ul style="list-style-type: none"> ■ detail how engagement undertaken was consistent with the Undertaking Engagement Guide: Guidance for State Significant Projects (DPIE, Nov 2021); and 	<p>Outlines the broader consultation requirements for the EIS. Section 4 summarises consultation relevant to the SIA.</p>

¹ In December 2021 the NSW Department of Planning, Industry and Environment, commonly known as DPIE, became the Department of Planning and Environment (DPE) after a NSW State Government portfolio reshuffle. Both reference are used in this report where key planning documents referenced were published under DPIE.

Issue	SEARs Requirement	Relevance to the SIA
	<ul style="list-style-type: none"> ■ describe the consultation process and the issues raised and identify where the design of the development has been amended in response to these issues. Where amendments have not been made to address an issue, an explanation should be provided. <p>In particular you must consult with:</p> <ul style="list-style-type: none"> ■ consult with the relevant local, State or Commonwealth Government authorities, service providers, community groups, affected landowners, exploration licence holders, quarry operators and mineral title holders; and ■ carry out detailed consultation with the following: <ul style="list-style-type: none"> – Oberon Council – NSW Aboriginal Land Council – DPE’s Biodiversity, Conservation and Science Directorate – NSW National Parks and Wildlife Service – Heritage NSW – DPE Water Group – WaterNSW – Environment Protection Authority – Crown Lands – Regional NSW – Mining, Exploration & Geoscience – Department of Primary Industries – Agriculture and Fisheries divisions – Transport for New South Wales – Transgrid – Department of Finance, Services and Innovation –Telco Authority – Fire & Rescue NSW – NSW Rural Fire Service – Commonwealth Department of Defence – Civil Aviation Safety Authority – Airservices Australia. 	
<p>Legislation, Policies & Guidelines</p>	<p>The assessment of the key issues listed above must take into account relevant guidelines, policies, and plans as identified. While not exhaustive, a list of some of the legislation, policies and guidelines that may be relevant to the environmental assessment of this proposal can be found at:</p> <ul style="list-style-type: none"> ■ https://www.planning.nsw.gov.au/Policy-and-Legislation/Planning-reforms/Rapid-Assessment-Framework/Improving-assessment-guidance ■ https://www.planningportal.nsw.gov.au/major-projects/assessment/policies-and-guidelines; and ■ http://www.environment.gov.au/epbc/publications#assessments 	<p>DPE’s SIA Guidelines (DPIE 2021a, 2021b) are discussed below (Section 1.2.2).</p>

Additional elements of the SEARs relating to Landscape and Visual, Noise and Vibration, Heritage, Land Use, and Aviation Safety are relevant to the SIA and are discussed in **Section 6**.

1.3.3 NSW SIA Guidelines

DPE's Social Impact Assessment Guideline: For State Significant Projects ('the Guideline') (DPIE 2021a) and Technical Supplement: Social Impact Assessment Guideline for State Significant Projects ('Technical Supplement') (DPIE 2021b), together referred to as 'the Guidelines', provide the most up to date guidance on undertaking SIAs in NSW. Together they update the 2020 draft versions of the same documents, and supersede the 2017 Social Impact Assessment Guideline for State Significant Mining, Petroleum, and Extractive Industry Development (DPIE 2017a) which had become the de facto guideline for all SSDs.

The Guideline intends to provide a rigorous framework to identify, evaluate, and respond to social impacts, guide meaningful stakeholder and community consultation on social impacts throughout project phases, and advise on ongoing project development, monitoring, and adaptive management. The Technical Supplement provides additional specific advice including on how the SIA should be presented, how to define likelihood and magnitude levels of social impacts, and how to determine impact significance (DPIE 2021b, pp 12-13). This SIA has been prepared in line with DPE's preferred approach drawing on the Guideline and Technical Supplement.

1.3.4 State, Regional and Community Planning

1.3.4.1 NSW Electricity Infrastructure Roadmap

The NSW Government's Electricity Infrastructure Roadmap is a framework to transition NSW to clean, reliable and affordable energy as existing carbon intensive power generation capacity is decommissioned over the coming years. It intends to modernise the electricity system by coordinating investment across power generation, storage and delivery activities. The Roadmap is expected to attract \$32 billion in private sector investment by 2030, creating 6,300 construction and 2,800 ongoing jobs, mainly in regional NSW, and is also expected to create an estimated \$1.5 billion in lease payments to landholders in regional NSW by 2042 (NSW Government 2021). It is underpinned by the NSW Electricity Strategy (NSW Government 2019) and the Electricity Infrastructure Investment Act 2020 (NSW), and makes a significant contribution to the NSW Government's Net Zero Plan for reaching net zero carbon emissions by 2050 (NSW Government 2020).

The Roadmap commits the NSW Government to establishing five Renewable Energy Zones (REZs), including one in the Central West and Orana Region. The Project is not located within the REZ, but it is consistent with the focus on renewable energy generation in the NSW Government's regional planning scheme.

1.3.4.2 Draft Central West and Orana Regional Plan 2041

The Draft Central West and Orana Regional Plan 2041 provides a 20-year land-use blueprint for the region and outlines the vision for the region focusing on a 'healthy, connected and resilient region, with a prosperous economy' (DPIE 2021d, p. 13). To achieve this vision the Government has acknowledged the central role renewable energy transition will have in the region. This is reflected in establishment of the Central West and Orana REZ and the potential for renewable energy opportunities including wind generation provided by the region's higher altitude tablelands, alongside pumped hydro battery storage potential. The Plan notes that projects located within the REZ will be complemented with existing and new projects elsewhere in the region, but that the impacts of their development are appropriately managed. This is reflected in Objectives 5 and 10 of the Plan:

- **Objective 5:** Ensure site selection and design embraces and respects the region's landscapes, character and cultural heritage

Visual landscapes and settings can be impacted through activities such as residential development encroaching on scenic backdrops and ridge lines and infrastructure development such as renewable energy projects. Scenic and cultural landscapes should be protected for their aesthetic, social and economic values and for the character and identity of the region. (DPIE 2021d, p. 36)

■ **Objective 10:** Provide accommodation options for temporary workers

Many areas experience high demand for short-term accommodation due to the construction of large-scale infrastructure, renewable energy and mining projects as well as seasonal agricultural employment... Addressing demand for housing and associated needs of workers will provide safe, secure, and suitable housing while also contributing to the economic growth of towns, particularly those near large investment projects. Short-term accommodation can be adapted into alternative uses such as tourism accommodation or low-cost housing for vulnerable people, as demand for accommodation fluctuates. This may also reduce pressure on social and affordable housing provision. (DPIE 2021d, p. 53)

The Draft Central West and Orana Regional Plan 2041 is informed by Local Strategic Planning Statements that set the 20-year vision for how Central West and Orana Councils use land and enhance the special character and values of communities.

1.3.4.3 Oberon LGA Local Strategic Planning Statement 2036

The Oberon Local Strategic Planning Statement 2040 (LSPS) (Oberon Council 2020) acknowledges the region's comparatively high wind speeds and identifies the potential of wind farming as an opportunity for the LGA. The LSPS' Planning Priority Four – Environment acknowledges the NSW Government's plans to increase renewable energy generation in the region but also notes the Council's role in managing land use conflicts and impacts on primary producers while supporting the region's agricultural identity and continuing to support the Right to Farm policy movement.

Related to this, the Oberon LSPS Vision is stated as: "Oberon – more than you imagine" while the stated mission is:

A prosperous town, village and rural communities set amongst the rolling hills, rivers, forests, mountains and caves of the Great Divide. Breathe fresh air in a landscape of light, colour and seasonal beauty. Life as it should be. (Oberon Council 2020, p. ii)

1.3.4.4 Oberon LGA Development Control Plan 2001 (amended 2012)

The Oberon Development Control Plan 2001 (DCP) (Oberon Council 2012), was updated to include Part O: Wind Power Generation during 2005. Within the NSW planning framework, DCPs complement other local environment planning instruments to provide more detailed planning and design guidelines. The 2005 DCP amendment added a chapter specific to wind farm developments given increased interest in such developments across the LGA and the region. Of particular regulatory concern noted in the DCP are the potential impacts of wind farms on productive agricultural land and visual amenity.

The DCP outlines Oberon Council's vision for wind power generation: "To promote well planned and considered development of wind energy development in Oberon that recognises, promotes and enhances the Oberon Shire as a desirable place to live in, invest in and visit." (Oberon 2012, p. 164)

The Objectives of the DCP are:

- To provide development controls and guidelines that will assist in achieving the objectives of the Oberon Local Environmental Plan, 1998 as amended;
- To provide development that will relate well to its surroundings both man made and natural;
- To promote and encourage a high quality of design and amenity;
- To restrict development to the Rural 1(a) zone only;
- To provide for, and require well considered development that is environmentally and economically sustainable;
- To minimise the likelihood of added costs to ratepayers of the Shire as a result of the development; and
- To promote sustainable energy. (Oberon 2012, p. 165.)

The DCP also establishes parameters for neighbour consultation upon receipt of a development application for a new wind farm development based on a 2 km radius, and a number of planning and environmental controls relating to:

- Land use conflicts, farming activity disturbances, and impacts on adjoining land;
- Encouraging projects that family farm unit income diversification and local employment generation;
- Minimising visual amenity and other impacts on nearby residencies; and
- Decommissioning. (Oberon 2012, p. 167.)

The above measures intend to maximise the benefits and limit the impacts associated with windfarm developments, in line with existing community values. The community values and aspirations of the Oberon LGA are further described in **Section 5**.

1.4 Purpose and Outline

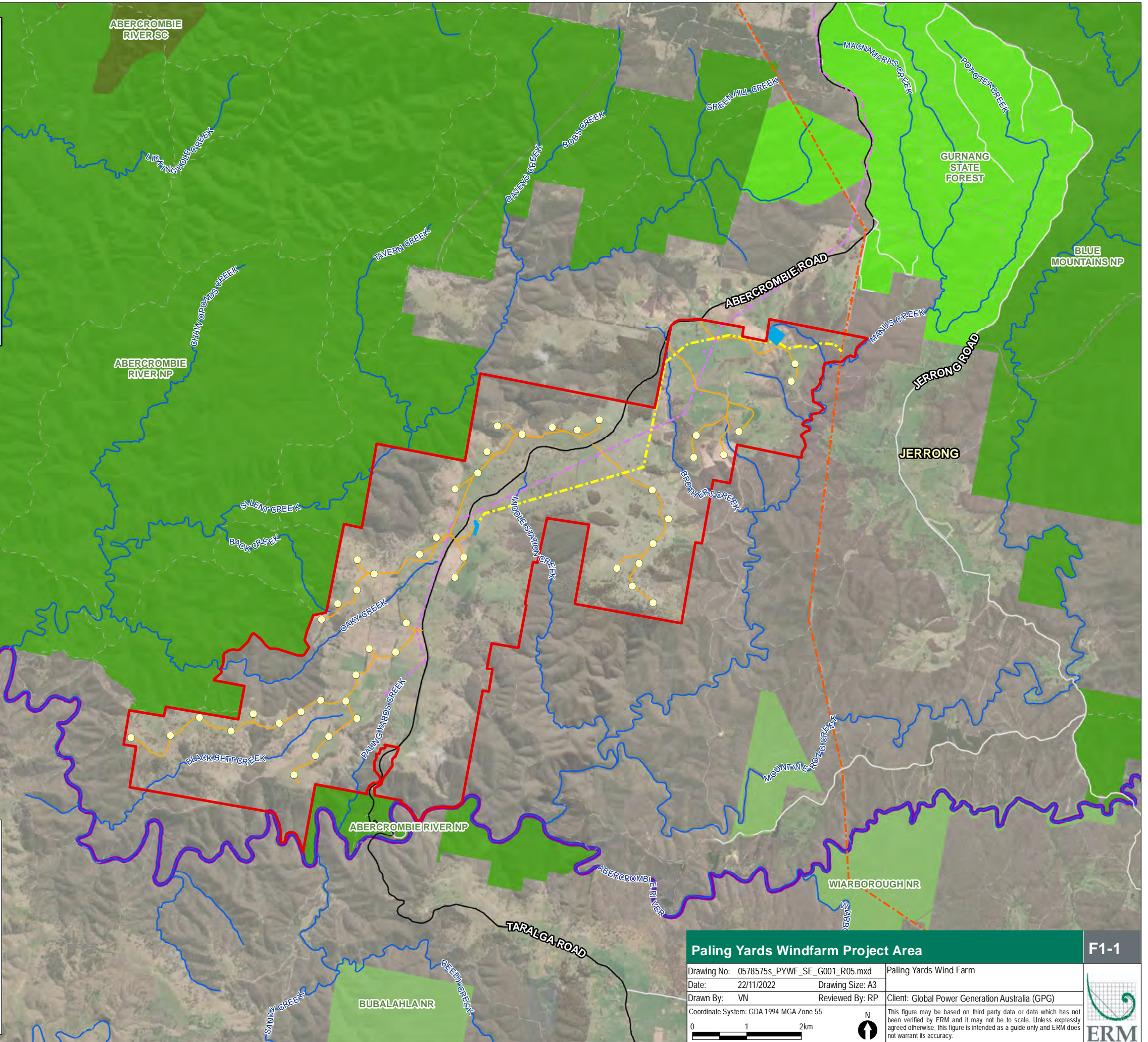
This SIA has been prepared in accordance with the provisions of the Guideline (DPIE 2021a) and Technical Supplement (DPIE 2021b). The purpose of this SIA is to provide the DPE with an understanding of the Project's potential social impacts, and the means by which these social impacts are identified, assessed, managed, and monitored, consistent with the legislative and regulatory context outlined above.

The SIA is structured as follows:

- **Section 2** provides an overview of the social impact assessment methodology;
- **Section 3** describes the scoping for the Project's Social Locality and Stakeholder Identification;
- **Section 4** provides an overview of stakeholder engagement undertaken for the Project to date, focusing on engagement relevant to the SIA;
- **Section 5** describes the existing baseline conditions in the Project's Social Locality;
- **Section 6** assesses the social impacts that may result from the Project, provides an overview of social impact enhancement and mitigation measures, and an assessment of residual impacts; and
- **Section 7** outlines and approach that will be followed in monitoring and managing social impacts into the construction and operation phases of the Project.

1.5 Authorship

The SIA Report was completed on 10 October 2022 by Dr Rene Provis, lead author, and contains all relevant information. The lead author holds a PhD in development anthropology from the University of New South Wales, and is a member of the International Association for Impact Assessment (IAIA) and the Australian Anthropological Society (AAS). The Report was completed in good faith in accordance with the relevant ethical frameworks, and to the lead author's knowledge does not contain any false or misleading information.



Legend

- Turbines
- Site Boundary
- Substation
- Proposed Transmission Line
- Access Road
- Transmission Line (330kV)
- Transmission Lines - 500kV and Towers
- Transmission Lines - Rural Distribution Lines
- Main Road
- Minor Road
- Path and Track
- Major Watercourse
- LGAs
- National Park
- Nature Reserve
- State Conservation Area
- State Forest

Source:
BaseData - DCDB and DTDB DLPI 2021
ESRI World Imagery 2018, ESRI World Street Map

Paling Yards Windfarm Project Area		F1-1
Drawing No: 0578575s_PYWF_SE_G001_R05.mxd	Paling Yards Wind Farm	
Date: 22/11/2022	Drawing Size: A3	
Drawn By: VN	Reviewed By: RP	Client: Global Power Generation Australia (GPG)
Coordinate System: GDA 1994 MGA Zone 55		
<small>This figure may be based on third party data or data which has not been verified by ERM and it may not be to scale. Unless expressly agreed otherwise, this figure is intended as a guide only and ERM does not warrant its accuracy.</small>		

2. SOCIAL IMPACT ASSESSMENT METHODOLOGY

This section describes the methodology utilised to conduct this SIA. The methodology typically applied to assessment of social impacts originates in the 1970s and initially emulated the approach undertaken in the assessment of environmental impacts. The practice of SIA has, however, evolved significantly over time in recognition that social issues differ fundamentally from biophysical issues, and that the primary task of SIA is not just the assessment but also the proper management of social impacts throughout the project lifecycle. This has led to a focus on the enhancement of benefits from the project for impacted communities, alongside ensuring that negative impacts are identified and effectively managed. This is necessary for the project to earn its ‘Social Licence to Operate’; and also because attempting to minimise harm (the traditional approach in SIA) does not ensure that the project will be considered acceptable by local stakeholders, or that a project does not actually cause significant harm.

Recognising this, the NSW Guideline and Technical Supplement (DPIE 2021a, 2021b) aim to enhance the rigour applied to SIAs with a view to minimising impacts and enhancing benefits in line with good international industry practice. The assessment has been undertaken in accordance with these Guidelines and the Project SEARs (outlined in **Section 1.1.1**). **Figure 2.1** outlines the steps taken to complete the SIA, which are described in the following sections.

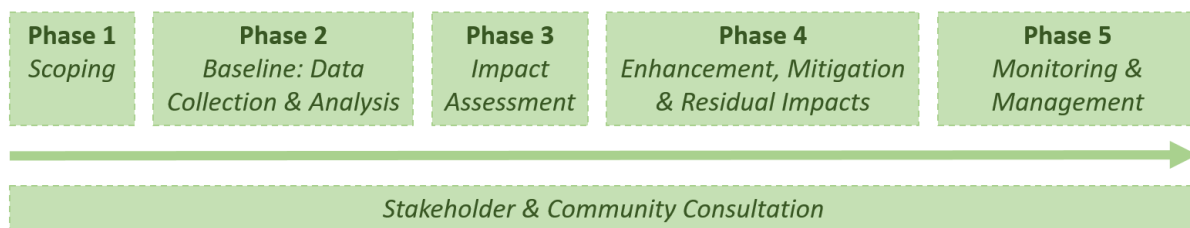


Figure 2.1 SIA Process

2.1 Phase 1: Scoping

Following good international industry practice (Vanclay et al 2015) and the NSW Guideline and Technical Supplement (DPIE 2021a, 2021b), the scoping undertaken for this SIA aimed to:

- Capture and characterise the likely social impacts to inform Project planning before social impacts start occurring;
- Enable a consistent but scalable approach to SIA where the level of assessment is proportionate to the scale and nature of the likely social impacts;
- Consider the information to be assessed during the SIA scoping and initial assessment and the approach to community engagement;
- Identify potential Project refinements and possible mitigation and enhancement measures; and
- Identify the impacts that may require further assessment in the EIS and the possible level of assessment for each impact.

The SIA also made use of DPE’s Social Impact Assessment Worksheet (scoping worksheet) (DPIE 2021c), which helped to identify potential social impacts through the following steps:

- Identification of Project activities that may cause impacts;
- Categorisation of impacts according to their effects on: way of life, community, accessibility, culture, health and wellbeing, surroundings, livelihoods, decision-making system; and whether the impacts are positive or negative, tangible or intangible;

- Determination as to which prior investigations are relevant to the Project;
- Identification of cumulative and combined impacts, including spatial, temporal, and linked impacts;
- Definition of material impact, including the extent of people affected, duration of impacts, intensity/scale of impacts, sensitivity of the people affected, and their level of concern or interest; and
- Assignment of assessment levels, such as detailed, standard, minor, or not relevant, for each identified impact.

2.2 Phase 2: Social Baseline Data Collection and Analysis

The social baseline describes the social context without the Project. It documents the existing social environment, conditions and trends relevant to the impacts identified. The social baseline is the benchmark against which direct, indirect and cumulative impacts are predicted and analysed.

The scope and content of the social baseline has been tailored to the Project context and the level of assessment of social impacts using meaningful indicators and information, including stakeholder engagement activities relevant to the SIA (**Section 4**). Where scoping identified that primary data was required for the assessment, stakeholder engagement activities for the EIS were adapted to provide this information (**Section 3**).

The data collected and presented in this SIA is based on a review of available data from a range of primary and secondary sources. This includes, but is not limited to:

- The Australian Bureau of Statistics (ABS) – Census (Community Profile), Socio-Economic Index for Areas (SEIFA), etc.;
- NSW Government Department data (e.g. NSW Health, Transport for NSW, and NSW Police Force);
- Local Government data;
- Stakeholder engagement outcomes – community insights, including issues and concerns, gathered through the stakeholder consultation process (**Section 4**);
- Local and State government planning, policy, and strategy documentation;
- Plans, policies and other documents provided by PYWF, and
- Planning and approval documentation from earlier Project iterations, particularly the EIS submitted in 2014 and the associated Consultation Report and Socio Economic Impact Assessment (ERM 2014).

Combined, this data seeks to portray community values, and how people and the things they value may be impacted by the Project. This includes consideration of:

- The features of the community, the social locality, and/or the landscape that people value which ranges from urban areas and the sense of community or the accessibility of services that the community experiences, to natural and diverse environments or quiet/vibrant neighbourhoods;
- How these features influence local people's way of life, health or wellbeing;
- How the Project might affect these features, and for which groups;
- How the Project could be modified to enhance these features and how they affect people's wellbeing; and
- How the Project may be designed to avoid and minimise any short-term adverse impacts.

In considering the above, the social baseline identifies and describes: the different social groups who may be affected by the Project; all the built and natural features that local people value and why they value them; the historical, current and expected social trends, including as a result of this Project and other projects in the area; the various social elements of value, and interpretations of them² while demonstrating appropriate social-science research methods and data limitations.

2.3 Phase 3: Impact Assessment

The impact assessment undertaken in the SIA differs from the EIS by placing people at the centre and considering the impacts from their perspective. The primary and secondary data collected and compiled for the social baseline, including community voices, is then assessed with the rigorous impact significance methodology, as described in the Technical Supplement (2021b).

In this approach, impact significance is understood as the likelihood of an impact occurring combined with the magnitude of impacts, both positive and negative, and prior to the application of any mitigation or management measures. The likelihood level refers to the probability of a social impact occurring as a result of the Project, while the magnitude is considered as a combination of the following characteristics rated from very low to very high:

- **Extent:** Who specifically is expected to be affected (directly, indirectly, and/or cumulatively), including any potential vulnerable people? Which location(s) and people are affected? (e.g. near neighbours, local, regional).
- **Duration:** When is the social impact expected to occur? Will it be time-limited (e.g. over particular Project phases) or permanent?
- **Severity:** What is the likely scale or degree of change? (e.g. mild, moderate, severe).
- **Intensity:** How sensitive/vulnerable (or how adaptable/resilient) are affected people to the impact, or (for positive impacts) how important is it to them? This might depend on the value they attach to the matter; whether it is rare/unique or replaceable; the extent to which it is tied to their identity; and their capacity to cope with or adapt to change.
- **Level of Concern/Interest:** How concerned/interested are people? Sometimes, concerns may be disproportionate to findings from technical assessments of likelihood, duration and/or severity. Concern itself can lead to negative impacts, while interest can lead to expectations of positive impacts.

Qualitative and quantitative indicators described in the social baseline are used to inform an understanding of the social impacts identified in the scoping phase across each of these five characteristics.

The **magnitude** for each impact from the following five levels can then be defined on the following scale:

- **Transformational:** Substantial change experienced in community wellbeing, livelihood, infrastructure, services, health, and/or heritage values; permanent displacement or addition of at least 20% of a community.
- **Major:** Substantial deterioration/improvement to something that people value highly, either lasting for an indefinite time, or affecting many people in a widespread area.
- **Moderate:** Noticeable deterioration/improvement to something that people value highly, either lasting for an extensive time, or affecting a group of people.
- **Minor:** Mild deterioration/improvement, for a reasonably short time, for a small number of people who are generally adaptable and not vulnerable.
- **Minimal:** Little noticeable change experienced by people in the locality.

² Social elements of value to people are defined in the Guideline as people's: way of life, community, accessibility, culture, health and wellbeing, surroundings, livelihoods, and decision-making systems (DPIE 2021a, p. 7).

The likelihood of an impact occurring along with its magnitude of impact as assessed above combine to yield a rating of social impact significance, as described in **Table 2.1**.

Table 2.1 Adapted DPE Social Impact Significance Matrix (2021b)

		Magnitude level				
		1 Minimal	2 Minor	3 Moderate	4 Major	5 Transformational
Likelihood level	A Almost certain	Medium	Medium	High	Very High	Very High
	B Likely	Low	Medium	High	High	Very High
	C Possible	Low	Medium	Medium	High	High
	D Unlikely	Low	Low	Medium	Medium	High
	E Very unlikely	Low	Low	Low	Medium	Medium

*Where impacts are positive the following colour scale is used:

Positive	Low	Medium	High	Very High
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2.4 Phase 4: Enhancement, Mitigation and Residual Impacts

Following the assessment of impacts, measures to avoid and/or minimise negative impacts are considered, including those implemented in earlier stages of Project planning and development. Where avoidance or minimisation is not possible, management strategies are identified. Where an impact is predicted to be positive, measures to enhance positive impacts are identified to ensure the maximum benefit to the community across all impact significance ratings.

The following factors (DPIE 2021b, p. 15) were considered in the development of mitigation measures:

- Ensuring a clear connection between the mitigation measure and the negative social impact being mitigated;
- Whether there is an applicable standard that defines what is acceptable;
- Whether the Project is the sole or primary cause of the negative social impact, and the scale of its relative contribution to the overall or cumulative impact;
- Whether the mitigation measure requires action by another party separate to the proponent;
- Whether the mitigation measure itself is likely to cause secondary social impacts;
- Whether the mitigation measure is reasonable or practicable;
- Whether and in what ways the mitigation measure is acceptable to affected people;
- Whether the mitigation measure will address all reasonably foreseeable scenarios; and
- Whether the mitigation approach is prescribed in a government policy, or if alternative formalised arrangements are required.

Social impact significance, as outlined in **Table 2.1**, is used to determine the level of management required with a proportional focus on impacts with a higher impact significance (i.e. medium, high and very high). The impact assessment and impact significance ratings derived in the assessment are revised after the application of management and mitigation strategies have been applied to provide a residual impact significance rating for each impact.

These management and mitigation strategies are arranged according to Project phase (e.g. Construction and Operation) and into the following categories: stakeholder and community; employment and procurement; local disruptions during construction; accommodation and worker influx; land use and landscape, and cumulative impacts. The management and mitigation strategies summarised in **Section 6** provide a preliminary Social Impact Management Plan (SIMP). The preliminary SIMP focuses on effective, adaptive, and actionable measures and includes consideration of the likelihood of their implementation and sustainability from the community's perspective.

2.5 Phase 5: Monitoring and Management Framework

The accuracy of the impact assessment, progress towards implementation of the SIMP, and the effectiveness of measures it contains is accompanied by a monitoring and management framework. The framework (and subsequent plan) includes and program for monitoring the predicted social impacts against actual impacts and describes:

- The desired outcomes in social terms, including measures and strategies detailed in the SIMP.
- The indicator(s) that will be used to monitor change.
- The targets against which performance will be assessed.
- The methods that will be used to monitor the social impact.
- The frequency of monitoring.
- The roles and responsibilities involved in the monitoring framework (and subsequent plan).
- The process for responding to monitoring results, including the process, and roles and responsibilities for identifying and implementing adaptive management strategies as required.

The framework also outlines any relevant social incident notification and reporting process, a program for ongoing analysis of social impacts positive and negative, identification of any data gaps and how they might be addressed, and processes for reviewing and reporting on the results of monitoring. Monitoring and evaluation plans are conditions typically applied during the Project's state assessment and approvals process. The framework outlined in **Section 7** provides the basis for developing a more detailed plan that will be required to meet this likely condition of approval, and will be consistent with any additional SIMP development that may also likely be required as conditions of approval.

3. SCOPING: SOCIAL LOCALITY AND STAKEHOLDER IDENTIFICATION

3.1 Approach to Determining the Social Locality

The first step in a social impact assessment is the scoping process, which helps to define the social area of influence, or Social Locality, as well as the potential interactions between the Project and people surrounding the Project who may experience impacts. For the purposes of the SIA, people include individuals, households, groups, communities, businesses, and other types of organisations. Collectively these are often referred to as 'receptors'.

In determining the Project's Social Locality, the following Project aspects were taken into consideration:

- The number of wind turbines and their locations across the Project Area, and the layout of the access tracks, the substation, and transmission line;
- The location of these components within the overall Project Area relative to sensitive land uses. This included proximity to environmental values and topographical features;
- Construction and operation phase activities, such as:
 - Land clearing and ongoing access for maintenance;
 - Workforce requirements, including skills required and accommodation arrangements;
 - Goods and services required by the Project; and
 - Haulage routes to and from the Project Area.

When considering these aspects, it was determined that the Project's Social Locality should include the Project Area, the area surrounding the Project Area wherein noise, visual and other amenity impacts may occur, the haulage routes where similar amenity impacts may be experienced, and the communities in larger centres that may provide workers or goods and services to the Project.

3.2 Description of the Social Locality

The Project is located on the southern portion of the Oberon Shire LGA (Oberon LGA), adjacent to the Upper Lachlan Shire LGA (Upper Lachlan LGA). Although the Project Area is contained entirely within the Oberon LGA, it is also accessible via Taralga Road to the south of the Project Area. Transportation (e.g. haulage routes) and other impacts are therefore also pertinent to the Upper Lachlan LGA. Town centres located in both LGAs will likely also provide goods and services to support the construction phase of the Project.

The Project Social Locality, as defined for the purposes of the SIA, is comprised of the following three components:

- The **Project Area and immediate surrounding areas**, located within the Australian Bureau of Statistics (ABS) Statistical Area Level 1 (SA1) No. 1106107 (containing the Project), and ABS SA1 No. 1154018 (immediately adjacent to the Project). SA1 data has been used to identify key baseline indicators for the Social Locality, where applicable. Additionally, LGA level data for the Oberon and Upper Lachlan LGAs and state level data for NSW are used to provide an understanding of the broader and comparative social context within which the Project is located.
- The **transportation and haulage routes**, comprising vehicular routes north via Abercrombie Road to Oberon, and south via Taralga and on to Goulburn and the Hume Highway via Taralga Road, to Crookwell via Taralga Road, Lagga-Taralga Road, and Laggan Road. Indicative travel distances from the approximate centre of the Project Area are provided in **Table 3.1**.
- The **surrounding towns and regional centres** of Oberon, Taralga, Goulburn and Crookwell, which may provide goods and services to support the construction phase of the Project. ABS Urban Centres and Localities (UCLs) provide baseline data for these towns and regional centres. The Goulburn Mulwaree LGA has also been included to further contextualise the ABS SA1 level data for the Project area.

The Project Area and immediate surrounding areas, SA1s, Oberon and Upper Lachlan LGAs, transportation and haulage routes, and UCLs for Oberon, Taralga, Goulburn and Crookwell form the Social Locality, as depicted in **Figure 1.1**. Indicative travel distances to the Project Area are provided in **Table 3.1**.

Table 3.1 Vehicular Travel Distances from the approximate centre of the Project Area

Town/Regional Centre	Travel distance
Oberon	63 km
Taralga	35 km
Goulburn	80 km
Crookwell	75 km

3.2.1 ABS Datasets

The data presented in the baseline provides an understanding of the communities within the Social Locality, including the Project Area and immediate surrounding areas, local transportation and haulage routes, and nearby regional centres. It is noted that not all data sets (e.g. health, crime, transport) are readily available at a (Statistical Area 1) SA1 level. Where this is the case, the most appropriate data is presented, which may be at a LGA or regional level.

Table 3.2 outlines the primary ABS datasets used to provide key demographic data across the Project's Social Locality. Where available, 2016 and 2021 Census data is used for the purposes of trend analysis.

Table 3.2 Summary of Relevant ABS Datasets

Location	2016		2021	
	Approx. area	ABS Data Reference	Approx. area	ABS Data Reference
Oberon LGA	3,625 km ²	LGA16100	3,625 km ²	LGA16100
SA1 (in south Oberon LGA)	868.7 km ²	1106107	868.7 km ²	10301106107
Oberon Urban Centre/Locality	7.1 km ²	UCL115107	-*	-
Upper Lachlan LGA	7,127.4 km ²	LGA17640	7,127.4 km ²	LGA17640
SA1 (in north Upper Lachlan LGA)	934 km ²	1154018	934 km ²	10105154018
Taralga Urban Centre/Locality	1.6 km ²	UCL122136	-	-
Crookwell Urban Centre/Locality	4.9 km ²	UCL115044	-	-
Goulburn Mulwaree LGA	3220.1 km ²	LGA13310	3220.1 km ²	LGA13310
Goulburn Urban Centre/Locality	55.6 km ²	UCL112008	-	-
NSW	800808.8 km ²	1	800810.8 km ²	1

*ABS UCL data from the 2021 Census will be released on 12 October 2022.

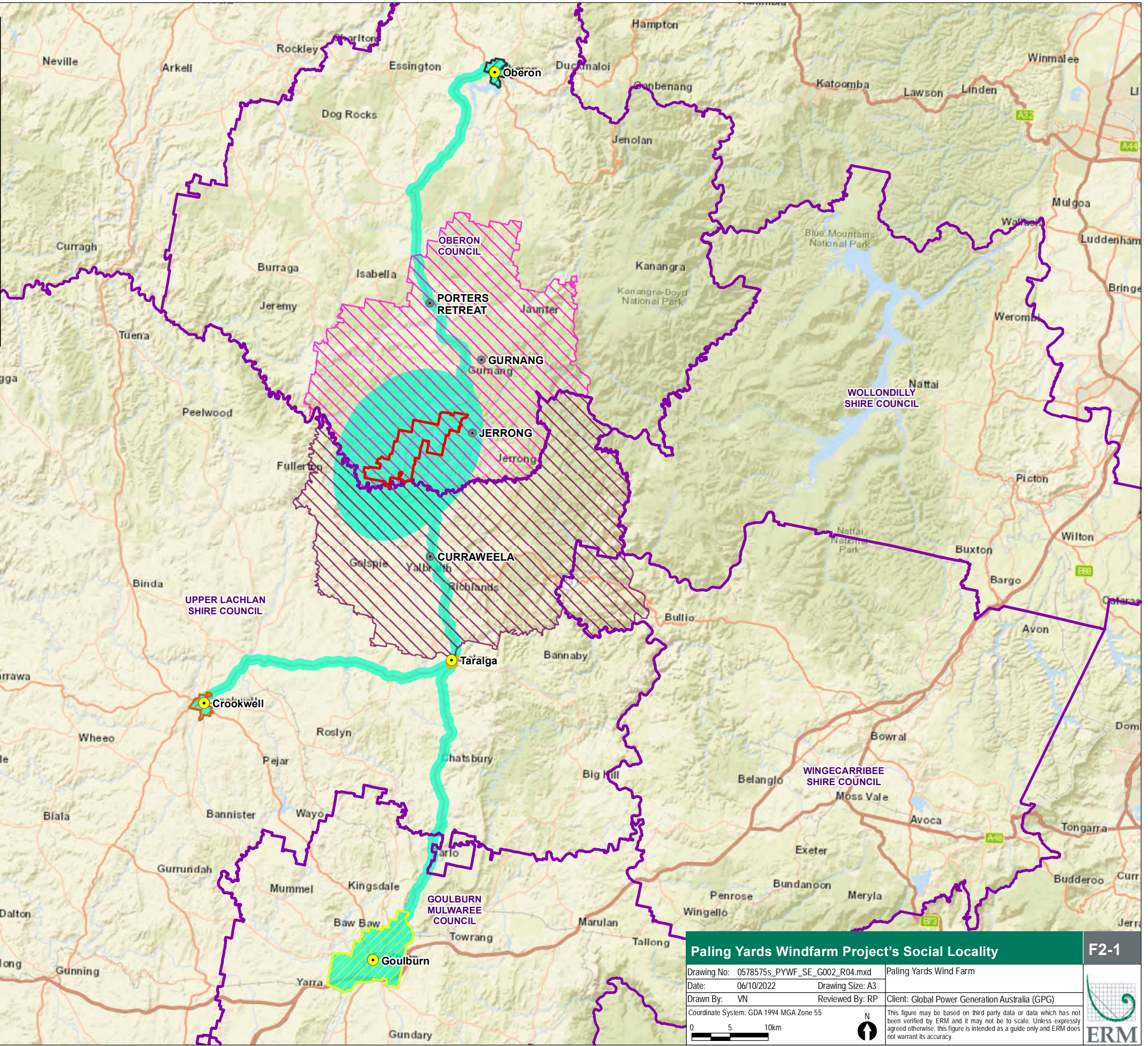
3.3 Identification of Key Stakeholder Groups

Based on this understanding of the Project's Social Locality, the stakeholder groups identified as potentially impacted by the Project are outlined in **Table 3.3**.

Table 3.3 Key Stakeholders

Stakeholder	Specific parties	Form of Consultation, Potential Interests/Concerns
Host Landowners	Landowners with the potential to host infrastructure, have already engaged in discussion or have already agreed to host infrastructure.	Individual consultation, access to private land, noise and other operational impacts including impacts on livestock, visual amenity, health and safety, security, construction disruption, remuneration, land value.
Immediate Neighbours	Neighbouring dwellings within 5 km of the proposed site and along the transmission corridor.	Individual consultation, access to private land, local character, noise and other operational impacts, visual amenity, property values, health and safety, security and privacy, construction disruption, impacts of construction traffic.
Surrounding Communities	Community members who live outside of a 5 km radius of the proposed site and the transmission corridor, including Porters Retreat and Curraweela and surrounds.	Community consultation, community wellbeing, economic benefits / impacts, impacts of construction traffic, health and safety, visual impacts, property values.
Aboriginal Communities	Registered Aboriginal Parties (RAPs) as identified through the Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW 2010) including: <ul style="list-style-type: none"> ■ Pejar LALC ■ Corroboree Aboriginal Corporation ■ Gunjeewong Cultural Heritage Corporation ■ Didge Ngunawal Clan Aboriginal Corporation 	Community consultation, heritage assessment, ongoing management of cultural values.
Approving Authority	Department of Planning and Environment	Community feedback, environmental impacts, project approval, regulatory compliance.
Local Council	Oberon Council: <ul style="list-style-type: none"> ■ Cr Mark Kellam (Mayor) ■ Gary Wallace (General Manager) ■ Mark Hitchenson (Development Planner) ■ Elected Councillors Upper Lachlan Shire Council (adjacent LGA) <ul style="list-style-type: none"> ■ Pam Kensit (Mayor) ■ Colleen Worthy (General Manager) 	Jobs, economic impacts, opportunities for tourism and other industry benefits. Community consultation, community wellbeing, impact on local residents and businesses, economic benefits, impacts on local roads and infrastructure.

A summary of the outcomes of engagement undertaken to-date with these groups is described in **Section 4**.



Legend

- Towns
- Localities
- Site Boundary
- Substation
- Project Social Locality
- LGAs

ABS Statistical Areas

- SA1 1154018
- SA1 1106107
- 115044, Crookwell (UCL)
- 122136, Taralga (UCL)
- 112008, Goulburn (UCL)
- 115107, Oberon (UCL)

Source:
 BaseData - DCDB and DTDB DLPI 2021
 SA1 - Australian Government 2016
 ESRI World Street Map

Paling Yards Windfarm Project's Social Locality		F2-1
Drawing No: 0578575s_PYWF_SE_G002_R04.mxd	Paling Yards Wind Farm	
Date: 06/10/2022	Drawing Size: A3	
Drawn By: VN	Reviewed By: RP	Client: Global Power Generation Australia (GPG)
Coordinate System: GDA 1994 MGA Zone 55		
0 5 10km		
		This figure may be based on third party data or data which has not been verified by ERM and it may not be to scale. Unless expressly agreed otherwise, this figure is intended as a guide only and ERM does not warrant its accuracy.

4. STAKEHOLDER ENGAGEMENT ACTIVITIES FOR THE SIA

Community and stakeholder engagement commenced in 2004 and has continued through several Project iterations. This section summarises the community and stakeholder engagement activities, and the associated outcomes, relevant to the SIA throughout these Project iterations.

4.1 Consultation Activities Relevant to the SIA

This section summarises the key themes, including benefits, issues and concerns raised throughout stakeholder engagement activities across all stakeholder groups. It further informs the scoping of social issues and potential impacts outlined above to ensure that these concerns are adequately captured in the impact assessment contained in **Section 6**.

A wide variety of historical and current consultation activities have been utilised to inform the SIA. Regular and ongoing stakeholder engagement activities as well as targeted technical studies throughout historical iterations of the Project have provided feedback and sentiment from Project neighbours, Aboriginal communities, government officials, and the wider community.

4.1.1 Consultation Undertaken during previous Project Iterations

The project was originally proposed by TME Australia in 2002, at which time wind monitoring masts were placed on site to determine the suitability of the wind resource. Once a suitable wind resource was confirmed, the project progressed through a joint venture with Gamesa Energy Australia Pty Ltd and a consultant team was established in 2004 to prepare an EIS and EPBC Act Referral. Contact and consultation about access and lease discussions with landholders and adjacent neighbours to the proposed site was initiated in early 2004. A planning focus meeting was held in February 2005 to provide NSW Department of Planning and Infrastructure (DoPI) with a formal brief of the project and to inform the preparation of the Director-General's Requirements (DGRs). However, due to an uncertain investment environment for renewable energy projects, an application was not lodged at that time.

On 18 December 2008, one of the host landowners organised a meeting for relevant project neighbours and community members at the Jerrong/Paling Yards local fire station. Representatives of TME Australia attended the meeting to answer any relevant questions.

In mid-2008, Union Fenosa Wind Australia took over the project from Gamesa Energy Australia Pty Ltd. On 29 October 2009, the Deputy Director General, Development Assessment for the Department of Planning, under delegation for the Minister for Planning, determined that the project was a project to which Part 3A of the EP&A Act applied. A Part 3A application was subsequently lodged. Union Fenosa Wind Australia Pty Ltd (later GPG) lodged a Preliminary Environmental Assessment on 9 April 2010 for the construction, operation and maintenance of up to 59 wind turbines and ancillary infrastructure. On 9 October 2012 an advertisement in the local newspaper Crookwell Gazette was published to invite people to nominate for the project Community Consultative Committee (CCC).

GPGA developed a community consultation and engagement program that aimed to provide the community and stakeholders with factual information about the project and gathering feedback about their concerns and interests, which can be subsequently addressed in the approvals process and influence the project design. In order to meet the information needs of the community, a range of consultation strategies were adopted and undertaken, including:

- Consultation with government departments and agencies, non-government agencies, community groups and individuals;
- Direct contact with identified community groups;
- Door-knock consultations undertaken within 5 km of the site and along the corridor of the proposed transmission line routes; and
- Community newsletter distributed to the local area and anyone registering interest in the project.

A key step in the stakeholder identification process and community consultation was undertaken through the door-knock consultation and surveys carried out by GPGA representatives on 30 May and 31 May 2011, 1 June 2011, and again on 5 July and 6 July 2011.

On 27 September 2012, letters were sent out to all non-involved properties within a 2 km buffer of the proposed turbines to inform them of the proposed project.

An EIS was submitted in 2014, reducing the number of turbines to 55 based on community feedback and consultation. The proposed Paling Yards Wind Farm EIS was on public exhibition from 28 March 2014 to 30 May 2014 at seven locations. They were:

- NSW DPE (Information Centre), 23-33 Bridge Street, Sydney;
- Taralga Community Service Centre, 29 Orchard Street, Taralga;
- Oberon Shire Council, 137-139 Oberon Street, Oberon;
- Oberon Shire Council Library, Corner of Dart and Fleming Streets, Oberon;
- Upper Lachlan Shire Council (Crookwell Office), 44 Spring Street, Crookwell;
- Crookwell Library, Denison Street Crookwell; and
- Nature Conservation Council, Level 2, 5 Wilson Street, Newtown.

The public exhibition period was advertised directly by the DPIE and notified the local community in the vicinity of the project site. In addition the proponent notified, by direct mail, neighbouring landowners within 5-10 km of the project site about the public exhibition period and an information session. Some of the immediate neighbouring landowners were also called directly to notify them of the events.

An information session was held on 27 May 2014 to provide community members and other stakeholders with an opportunity to learn more about the Project and ask questions. Consultants that prepared the EIS reports were available to answer inquiries from attendees.

A CCC meeting was organised on 17 July 2014 at the Oberon Council offices. The CCC meeting was attended by proponent representatives, four Council representatives and one community representative. The Council's Planning and Development Director attended the meeting as an observer.

The Proponent was then notified by the Department and requested to respond to the submissions received. As per the NSW Guidelines on Responding to Submissions, a submissions report was prepared. The following tasks were undertaken as prescribed by the guidelines:

- Possible refinements to the project were considered;
- Assessment of submissions received;
- Engagement with respondents and objectors (where possible);
- Determination of any amendments to the project are required (none required); and
- Preparation and submission of the report.

4.1.1.1 Key Stakeholder Issues and Concerns Raised During Earlier Project Iterations

During EIS public exhibition in 2014 a total of 22 submissions were received. Of these, 11 comments were submitted from government agencies and 11 comments / objections were submitted by community members. There were at least 10 nearby residents that were not supportive of the original proposal.

The key areas of interest, and number of submissions that commented based on the 2014 application and EIS, were:

- Noise and vibration (9)
- Landscape and visual (8)
- Property values (7)
- Traffic and roadworks (6)
- Environment (5)
- Flora and fauna (5)
- Health (4)
- Socio-economic (4)
- Fire / bushfire (3)
- Electricity price (3)
- Transmission line options (3)
- Turbine layout – micro-siting (3)
- Heritage (2)
- Aviation (2)
- Community Enhancement Fund (1)
- Crown Land (1)
- Cumulative (1)
- EMI/Telecommunication (1)
- Hydrology (1)
- Mineral exploration (1)

Since 2014, the Proponent has been involved in ongoing discussions with some of the objectors. Consideration was given to possible mitigation measures, including drafting neighbour agreements.

In June 2020 the application was withdrawn following further discussions with the DPIE, with agreement that due to the advancements in the design of wind turbine technology and the amount of time that had passed since the original submission, the best approach would be to submit a new application for assessment based on a revised design and current legislative requirements. In July 2020 all landowners and close neighbours were informed of the decision by GPG to withdraw the current application.

4.1.2 Consultation Undertaken since 2021

In August 2020 Tract Consultants was contracted to commence work preparing a new application for lodgement in mid-2021. In January 2021, calls were made by GPG to property owners within a 5 km radius of the proposed project site. The landowners were informed of the intention to submit a new application to DPIE.

In August 2021, GPG prepared to undertake a doorknock of neighbouring properties in the vicinity of the Project Area. The door knock was postponed due to restrictions issued by NSW Health due to the COVID-19 pandemic. In September 2021, a newsletter was distributed (physical and e-mail-out) to neighbours and the two councils, updating the community on the project and including a link to a community feedback survey, the Paling Yards - Community Feedback 2021 Survey.

Following receipt of the SEARs in March 2022, the Project team re-engaged with landowners within 5 km of the site with a focus on insights related to visual assessment in May 2022.

The broader community were encouraged to participate in consultation throughout July and into August 2022. Local advertising via traditional media in the Oberon Review, online publication the Crookwell Gazette and radio advertising on 2BS were used to provide details about the community information sessions and encourage people to visit the website and complete a survey.

Community information sessions were staffed by GPG Australia and subject matter experts from Tract, ERM, Transgrid and SLR to respond to any noise related enquiries. There were 22 local community members who attended the community information sessions and 18 surveys completed – the outcomes of which have been considered in this SIA.

Engagement with Traditional Owner groups was undertaken during preparation of the Cultural Heritage Assessment Report (CHAR) during 2021-22, and included the following Registered Aboriginal Parties (RAPs): the Corroboree Aboriginal Corporation, Gunjee Wong, the Didge Ngunawal Clan, and the Pejar Local Aboriginal Land Council (LALC).

4.1.2.1 Key Stakeholder Issues and Concerns Raised Since 2021

Community perception surveys undertaken during July-August 2022 indicated that community values most strongly resonated with environment (flora and fauna), farming, and community and family. Respondents particularly noted the value of the natural landscape, rolling hills and Abercrombie River.

While there was a mix of support for the project, 58% strongly or moderately supported the proposed wind farm. Of the perceived project benefits, clean energy appeared the most significant to respondents.

Surveys indicated that the greatest concerns for the community would be effects on the environment and visual impacts, followed by effects on land use and noise.

The community benefits believed to be of most value were local employment/training opportunities and sustainability initiatives. Respondents particularly requested community benefits that are suited to the unique challenges of living in a rural area.

Table 4.1 Community Views

Theme / Topic	Comment Raised
Community Benefits	Requests for clarity around community benefits to be derived from the Project.
	Requests for information on the threshold for neighbour deeds. Asked to be considered despite being outside the 3.5-4 km radius.
	Keen to find out what benefits are/will be available.
	Seeking more information on community benefits and how funds will be spent, especially as there are no local schools etc. to receive funding.
	Seeking clarity on definition of 'close' for financial benefits and eligibility.
	Request for a list of benefits to the community.
	Expressions of concern for volume of any real ongoing benefits – residents even outside the specific radius should be eligible for a monetary payment.
	There should be a monetary payment for those with direct visual impact for the duration of the Project life (per annum depending on the visual impact).
	There should be provision and installation of Battery Systems to households for use when there are power outages.
	Request for assistance with the upgrade of not only Abercrombie Road, but also Jerrong and Cosgrove Roads – Increased traffic would be using these bypass roads, around road closures/construction for the wind farm.
	Suggested that there are no benefits to the local community from this Project – including commentary that there is no unemployment in the local area and very little accommodation available.
	Community benefits must be substantive and not attempts to influence the community in the Project's favour.
	Suggested Education Scholarship for trade and University as a community benefit.
	Installation of electric car adaptors at Oberon Petrol Stations.
Employment opportunities would be a benefit to the local community.	
Suggested an employee teaching initiative around respecting and protecting native flora and fauna.	
Transport and Traffic	Highlighted the bends along O'Connell Road and avenue of trees in the township of O'Connell - wanted to be sure team was well aware of constraints.
	Questions regarding traffic impacts and potential road damage.
	Concerns regarding access to deliver blades – insistent that roads are not suitable due to bends and width.

Theme / Topic	Comment Raised
	Suggestion for blades be air lifted into Paling Yards, exemplified provided of a Project in Sweden using helicopters to deliver parts of a bridge.
	Concerns regarding traffic impacts and road access especially transporting the turbines.
	Questions regarding truck impacts and notifications in relation to moving cattle / livestock on roads to other paddocks.
	Construction with trucks and vibration and the 'whoosh' of turbines will scare and impact the native animals, those risks must be mitigated.
	The road network is unsuitable for a Project / industry of this magnitude.
	Concern that there will be undue effect on rural roadways while transporting the wind turbines.
Community Engagement	Mayor invited the Project team to attend the Oberon Farmers Market.
	Suggestion that not many of the community knew about the community engagement sessions.
	Suggested seeking more opportunities for Oberon district community to provide feedback and gain more information.
	Expression of preference for hard copy documents, intimidated by too many emails.
	Critical of Black Springs Community Hall as the venue for Community Information Sessions and expressed suspicion of GPG's intentions.
	Critical of current community engagement.
	Felt survey was too restrictive and difficult to complete.
	Suggestion to format future engagement as presentation and Q&A session.
Landscape and Visual	Concern regarding viewpoints of photomontages and appropriate representation.
	Requests for specific visual impact consideration from private properties.
	Recommended use of local landmarks to better help understand turbine dimensions.
	Comments regarding local visual impact, however supportive of the proposed location.
	The rural vista is pristine, and the placement of the wind turbines must not destroy that.
	Request for more maps and examples of visual impacts.
	Concern regarding benefits to homeowners along Jerrong Road who are impacted visually.
Project Design	Opinion that the proposed wind farm will have no benefit (and most of the local community), as her farm hardly uses any electricity.
	Scepticism about the efficiency of NSW Government's planning open state forestry for wind farms.
	Suggested the windfarm should be offshore on the east coast where electricity demand is present and has the least impact on the environment and wildlife, and where transmission facilities and substations are already in place.
	Suggested that GPG find an alternative site with a preference near the coast where it is assumed the frequency of wind is higher.
	The Project team should give consideration to long-term expansion in the design of the Project.
Noise and Vibration	Reference to Crookwell Wind Farm and impact to TV signal.
	Concern that current mobile coverage will be worse-off after construction of the wind farm. Uncertainty if this will be covered in the EMI assessment.
	Expressed desire to maintain a quiet, pristine environment.
	Concern about the effects on noise – compromising the pristine rural amenities of the area.
	Concern that a wind farm will create a visual and audible blight on the landscape.

Theme / Topic	Comment Raised
Biosecurity	Serious concerns about foot-and-mouth disease (FMD) spreading to the area. The emergence and rapid spread of FMD in Indonesia has changed the risk profile for passengers and goods arriving in Australia. Stakeholder concern is high regarding cattle and sheep becoming at risk of FMD.
	Existing (draft) biosecurity risk management plan needs to be updated to include the latest development, guidelines and restrictions.
	Expressed that the Paling Yards area forms its own "bioregion" which is less susceptible to global warming. Therefore do not see any reason for the wind farm to be constructed at this location.
	Comment about preserving the pristine habitat of local animals, particularly protecting animals during the construction phase.
Proponent	Concerned about the ownership of GPG and perceived it as an overseas company with profits sent overseas.
	Comment expressing disapproval in reference to GPG being 25% owned by the Kuwait Investment Authority.
	Query regarding where is funding for the wind farm is coming from.
	Perception that there are no benefits associated with the wind farm except to the company who own it.
	Concern that foreign ownership will not provide benefits to the local community.
Indigenous and Historic Heritage	Concern regarding heritage trees in O'Connell and possible damage in transport process.
	Potential for artefact findings around site, and conceded they may be clustered to the west (outside Project boundary).
Project History	Mentioned previous version of Project and concerns from neighbours.
Health Risks	Concern about health impacts to the local residents.
Property Values	Concerned that property will be devalued – curious about evidence that it will not be.

5. SOCIAL BASELINE

5.1 Land Use Context

The Project Area's immediate surroundings comprise sparsely populated rural communities mainly employed in beef and sheep farming, and forestry related industries. The demographic profile of the area indicates a below median age population, strong indigenous representation, and a high percentage of unoccupied dwellings. The Project Area contains little to no social infrastructure or commerce with the closest such services available at Taralga, approximately 35 km away.

The Project occupies an area approximately 11.5 km in length and varying in width up to approximately 3 km. The 52 wind turbines are distributed over the extent of this area, while the transmission line extends a further 5 km to connect with the existing Mt Piper to Barnaby 500 kV transmission line.

Land use within the vicinity of the Project Area typically comprises mixed farming with livestock and crops, forestry, and national park. The Project Area and transmission line are spread over rural properties zoned 'RU1: Primary Production' under the Oberon Local Environmental Plan, 2013. The majority of the north western and a portion of the southern boundary of the Project Area is adjacent to the Abercrombie River National Park, zoned 'E1: National Parks and Nature Reserves'. North of the proposed transmission line several lots are zoned 'RU3: Forestry', while to the south lots are predominantly zoned 'RU2: Rural Landscape'.

5.2 Population Demographics

Table 5.1 draws on the ABS datasets listed in **Table 3.2** to provide a demographic overview of the Social Locality. As outlined in **Section 3.2**, the Project Area is located within ABS SA1 No. 10301106107.³ This Statistical Area is the primary source providing details of the impacted community's defining characteristics and is used to provide an understanding of vulnerable groups within the Project's immediate Social Locality.

The Social Locality is characterised by aging populations in the town centres and a younger population in the ABS SA1 within which the Project is located. This area also has a much higher proportion of residents identifying as Indigenous Australian when compared to the LGA, surrounding LGAs, and the state of NSW. Between 2016-2021, the Oberon LGA experienced modest population growth and trended toward a higher proportion of residents identifying as Indigenous Australian, and a slightly higher median age. Contrary to surrounding regions, however, the SA1 containing the Project experienced a population decline and significant increase in the proportion of population over the age of 65.

Table 5.1 Key Population Indicators across the Project's Social Locality

ABS Statistical Area	Census Year	Population	Median Age	Indigenous Pop. (%)	Pop. over 65 Years of Age	Household composition (families/ singles/ group, %)
Oberon LGA 16100 (LGA)	2021	5,580	47	4.7%	24.9%	68.9% / 28.8% / 2.3%
	2016	5,301	45	3.4%	22.1%	70.4% / 27.3% / 2.3%

³ ABS SA1 1106107 (2016) relabelled 10301106107 (2021) represents the closest approximation of the Project area's locality.

ABS Statistical Area	Census Year	Population	Median Age	Indigenous Pop. (%)	Pop. over 65 Years of Age	Household composition (families/ singles/ group, %)
SA1 (in south Oberon LGA) 1106107 (SA1)	2021	247	38	10.5%	20.7%	64.9% / 28.1% / 7.0%
	2016	280	29	8.5%	8.5%	63.6% / 29.1% / 7.3%
Oberon 115107 (UCL)	2021	-*	-	-	-	-
	2016	2,491	42	3.6%	22.8%	63.3% / 34.3% / 2.4%
Upper Lachlan LGA 17640 (LGA)	2021	8,514	49	3.1%	25.1%	71.3% / 27.6% / 1.2%
	2016	7,695	48	2.3%	23.6%	69.4% / 29% / 1.6%
SA1 (in north Upper Lachlan LGA) 1154018 (SA1)	2021	318	53	0.0%	31.1%	73.4% / 23.4% / 3.1%
	2016	256	52	0.0%	33.1%	69.6% / 25.5% / 4.9%
Taralga 122136 (UCL)	2021	-	-	-	-	-
	2016	336	47	0.9%	27.7%	55.7% / 41.7% / 2.6%
Crookwell 115044 (UCL)	2021	-	-	-	-	-
	2016	2,105	51	2.7%	30.5%	62.7% / 35.4% / 1.9%
Goulburn Mulwaree LGA 13310 (LGA)	2021	32,053	41	5.1%	20.9%	66.9% / 30.4% / 2.6%
	2016	29,609	42	4.0%	19.4%	68.2% / 29.3% / 2.5%
Goulburn 112008 (UCL)	2021	-	-	-	-	-
	2016	22,419	40	4.3%	19.3%	65.5% / 31.9% / 2.6%
NSW Code 1 (STE)	2021	8,072,163	39	3.4%	17.7%	71.2% / 25.0% / 3.8%
	2016	7,480,228	38	2.9%	16.2%	72.0% / 23.8% / 4.2%

*ABS UCL data from the 2021 Census will be released on 12 October 2022.

5.2.1 SEIFA

SEIFA is a product developed by the ABS⁴ that ranks areas in Australia according to relative socio-economic advantage and disadvantage. The indexes are based on information from the five-yearly Census, with SEIFA 2016 based on Census 2016 data. The SEIFA is commonly used to determine areas that require funding and services, identify new business opportunities, and assist research into the relationship between socio-economic disadvantage and various social outcomes. A relative measure of socio-economic disadvantage was first produced by the ABS following the 1971 Census while the SEIFA in its present form was first produced from the 1986 Census data (ABS 2018b).

⁴ Socio-Economic Indexes for Areas (SEIFA) is a product developed by the ABS that ranks areas in Australia according to relative socio-economic advantage and disadvantage. The indexes are based on information from the five-yearly Census, available at: <https://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/2033.0.55.001Main+Features12016?OpenDocument>.

The concept of relative socio-economic advantage and disadvantage used in the SEIFA 2016 is the same as that used for the previous two censuses (2006 and 2011). The ABS broadly defines relative socio-economic advantage in terms of people's access to material and social resources, and their ability to participate in society. This is broadly defined in recognition of the many concepts that have emerged in the literature to describe advantage and disadvantage.

The dimensions included in SEIFA are guided by international research, given the constraints of Census data. The Census does collect information on the key dimensions of income, education, employment, occupation, housing, and some other miscellaneous indicators of advantage and disadvantage; these are the candidate variables used to construct the SEIFA (ABS 2018b).

The latest available SEIFA indicators across the Project's Social Locality are reported in **Table 5.2**. While the Oberon LGA area exhibits a moderate degree of socio-economic disadvantage, the SA1 containing the Project relatively more disadvantaged compared to the LGA and surrounding areas.

Table 5.2 SEIFA Indicators across the Project's Social Locality*

ABS Statistical Area	SEIFA (percentile in NSW)
Oberon LGA 16100 (LGA)	46
SA1 (in south Oberon LGA) 1106107 (SA1)	42
Oberon 115107 (UCL)	..**
Upper Lachlan LGA 17640 (LGA)	70
SA1 (in north Upper Lachlan LGA) 1154018 (SA1)	45
Taralga 122136 (UCL)	-
Crookwell 115044 (UCL)	-
Goulburn Mulwaree LGA 13310 (LGA)	40
Goulburn 112008 (UCL)	-
NSW Code 1 (STE)	-

*SEIFA data from the 2016 Census is provided in ABS 2018. SEIFA data from 2021 Census will be released during 2023.

** SEIFA is not provided for ABS UCL Statistical Areas.

5.3 Economic Profile

Table 5.3 characterises the economic profile of the Social Locality through the key industries and areas of employment for SA1s and the three LGAs (Oberon LGA, Upper Lachlan LGA, Goulburn Mulwaree LGA), and NSW as a whole.

Table 5.3 Key Industries for Select ABS Statistical Areas (2016 Census Data)*

Location	Key Occupations and Industries
SA1 (in Oberon LGA) 1106107 (SA1)	<ul style="list-style-type: none"> ■ Of the 280 residents in this SA1, 65 reported being in the workforce (including three unemployed persons). ■ The occupations reported were Managers (42.6%), Technicians and Trades Workers (13.2%), Professionals (11.8%), Community and Personal Service Workers (8.8%), Clerical and Administrative Workers (8.8%), Machinery Operators and Drivers (7.4%) and Labourers (7.4%). ■ Of the employed people in this SA1, 20.8% worked in Beef Cattle Farming (Specialised). Other major industries of employment included Sheep Farming (Specialised) (16.7%), Sheep-Beef Cattle Farming (12.5%), Log Sawmilling (6.2%) and Cafes and Restaurants (6.2%).

Location	Key Occupations and Industries
Oberon LGA 16100 (LGA)	<ul style="list-style-type: none"> ■ The most common occupations in the Oberon LGA include Managers (18.6%), Technicians and Trades Workers (14.3%), Machinery Operators and Drivers (14.2%), Professionals (12.0%), and Labourers (12.0%). ■ Of the employed people in the Oberon LGA, 4.9% worked in Log Sawmilling. Other major industries of employment included Beef Cattle Farming (Specialised) (4.2%), Sheep-Beef Cattle Farming (3.7%), Local Government Administration (3.4%) and Road Freight Transport (3.1%).
SA1 (in Upper Lachlan LGA) 1154018 (SA1)	<ul style="list-style-type: none"> ■ Of the 256 residents in this SA1, 126 reported being in the workforce (including six unemployed persons). ■ The occupations reported were Managers 45.7%, Professionals 16.2%, Labourers 10.5%, Technicians and Trades Workers 9.5%, Community and Personal Service Workers 7.6%, Clerical and Administrative Workers 7.6% and Sales Workers 2.9%. ■ Of the employed people in 1154018 (Statistical Area Level 1), 21.6% worked in Beef Cattle Farming (Specialised). Other major industries of employment included Aged Care Residential Services 9.3%, Sheep Farming (Specialised) 7.2%, Sheep-Beef Cattle Farming 4.1% and Shearing Services 4.1%.
Upper Lachlan LGA 17640 (LGA)	<ul style="list-style-type: none"> ■ The most common occupations in the Upper Lachlan Shire LGA included Managers (26.8%), Technicians and Trades Workers (13.7%), Professionals (12.8%), Labourers (11.4%), and Clerical and Administrative Workers (10.8%). ■ Of the employed people in Upper Lachlan Shire LGA, 11.1% worked in Sheep Farming (Specialised). Other major industries of employment included Beef Cattle Farming (Specialised) (4.8%), Sheep-Beef Cattle Farming (4.1%), Local Government Administration (3.6%) and Aged Care Residential Services (3.1%).
NSW Code 1 (STE)	<ul style="list-style-type: none"> ■ The most common occupations in NSW included Professionals (23.6%), Clerical and Administrative Workers (13.8%), Managers (13.5%), Technicians and Trades Workers (12.7%), and Community and Personal Service Workers (10.4%). ■ Of the employed people in New South Wales, 3.5% worked in Hospitals (except Psychiatric Hospitals). Other major industries of employment included Cafes and Restaurants (2.4%), Supermarket and Grocery Stores (2.2%), Aged Care Residential Services (2.0%) and Primary Education (1.9%).

* Economic data from the 2021 Census will be released on 12 October 2022.

5.4 Housing and Accommodation

Rental affordability and availability are the most likely portion of the housing market to respond to change in population prompted by large projects and is a key component for economic vitality of communities and wellbeing of individuals (Lawrie et al. 2011). Generally, housing stress can occur when rent exceeds 30% of a low-income household gross income.⁵ SGS in partnership with National Shelter, Beyond Bank, and Brotherhood of St Laurence have published the Rental Affordability Index (RAI) since 2015 (SGS 2022). The findings identify that in Quarter 2, 2021 Oberon was considered 'Very Affordable', whilst Taralga and Crookwell were listed as 'Acceptable' (SGS 2022).

A review of housing vacancy data (SQM Research 2022) exhibited that Oberon's highest vacancy rate was in March 2015 at 20.6%, by January 2020 the rate dropped to 4.2% and by May 2022 the vacancy rate was at 0.7%. Crookwell's highest vacancy rate was in November 2018 at 1.5%, by May 2022 the vacancy had dropped to 0.4%. For Taralga, December 2014 had the highest vacancy rate of 4.3%, by May 2022 the vacancy rate had dropped to 0.7% (SQM Research 2022). Regarding rental availability in the social locality, at the time of writing Oberon has nine rental properties available, and the Upper Lachlan Shire has three rental properties available (Real Estate Investor 2022).

⁵ Specifically, the ABS and the Australian Institute of Health and Welfare apply the 30/40 rule which identifies households in the lowest 40% of incomes that spend more than 30% of gross household income on housing costs as being subject to financial housing stress. (See: AIHW 2022 and ABS 2022b.)

Short-term tourist accommodation such as hotels, motels, cabins and caravan parks are important in regional areas to provide accommodation for visitors and to support regional tourism and economic activity. The LGA's of the Social Locality include the Upper Lachlan region which has a current vacancy rate of 0.06%, Oberon with a current vacancy rate of 0.55% and Goulburn Mulwaree with a current vacancy rate of 0.42% (Real Estate Investor 2022).

Key income and housing indicators across the Project's Social Locality are reported in **Table 5.4**.

Table 5.4 Key Income and Housing Indicators across the Social Locality

ABS Statistical Area	Census Year	Median Weekly Household Income	Unemployment (%)	Dwelling count (occupied/ unoccupied/ (%))	Dwelling tenure (owned outright + mortgaged / rented, %)*
Oberon LGA 16100 (LGA)	2021	\$1,441	-**	2,038 / 470 (18.8%)	74.2% / 20.6%
	2016	\$1,239	5.7%	1,877 / 506 (21%)	72.9% / 23.4%
SA1 (in south Oberon LGA) 1106107 (SA1)	2021	\$1,531	-	55 / 48 (47.1%)	75.4% / 18.2%
	2016	\$1,274	4.6%	57 / 40 (41%)	72.7% / 27.3%
Oberon 115107 (UCL)	2021	-	-	-	-
	2016	\$1,109	7.9%	944 / 114 (11%)	65.4% / 31.2%
Upper Lachlan LGA 17640 (LGA)	2021	\$1,465	-	3,249 / 983 (23.3%)	81.2% / 12.6%
	2016	\$1,161	3.9%	2,911 / 1,125 (28%)	78.8% / 17.3%
SA1 (in north Upper Lachlan LGA) 1154018 (SA1)	2021	\$1,462	-	126 / 154 (54.4%)	92.1% / 7.1%
	2016	\$1,062	4.8%	104 / 169 (62%)	83.9% / 11.8%
Taralga 122136 (UCL)	2021	-	-	-	-
	2016	\$909	7.5%	115 / 43 (27%)	65.5% / 22.4%
Crookwell 115044 (UCL)	2021	-	-	-	-
	2016	\$904	4.8%	870 / 123 (12%)	73.5% / 23%
Goulburn Mulwaree LGA 13310 (LGA)	2021	\$1,466	-	12,045 / 1,799 (13%)	67.6% / 28.9%
	2016	\$1,196	6.3%	10,948 / 1,928 (15%)	67.6% / 28.6%
Goulburn 112008 (UCL)	2021	-	-	-	-
	2016	\$1,155	6.9%	8,423 / 1,022 (11%)	63% / 33%
NSW Code 1 (STE)	2021	\$1,829	-	2,900,486 / 299,524 (9.4%)	64% / 32.6%
	2016	\$1,486	6.3%	2,604,320 / 284,741 (10%)	64.5% / 31.8%

*The residual percentage comprises other tenure types and tenure not stated.

** Unemployment data from the 2021 Census will be released on 12 October 2022.

5.5 Social Infrastructure and Community Wellbeing

Social infrastructure comprises schools and other education institutions, medical services, emergency services, recreational facilities and community organisations. Some commercial services are also listed under social infrastructure, such as childcare facilities.

Social infrastructure in the rural localities in the immediate vicinity of the Project Area is limited to outdoor recreation areas in the Abercrombie River National Park, such as the Bummaroo Ford campground and various trails throughout the Park. The nearest town is Taralga (population of 336) (ABS UCL), located approximately 35 km south of the Project Area. Taralga has a fortnightly General Practitioner service with a single practitioner who is otherwise based in Crookwell. Taralga hosts a public primary school, a childcare centre, a post office, Rural Fire Service (RFS), a golf club, two progress associations, and a historical society and museum. Taralga also has a range of accommodation and retail businesses including a café and agricultural supplies business.

Oberon (population of 2,491) is the nearest regional centre servicing the north of the Project Area. The Oberon Multi-Purpose Service is public hospital providing a variety of medical services, including a 24-hour emergency facility. Oberon also has a separate medical centre with general practitioners. Oberon is located in the Western NSW Local Health District, while all other regional centres within the Social Locality are located in the Southern NSW Local Health District. Emergency services based in Oberon include NSW Police, Ambulance, Fire and Rescue, RFS, and the State Emergency Service (SES). Oberon has private and public primary schools, and a high school. A variety of religious organisations and churches are present in Oberon, including a Catholic convent, along with branches of the Returned Services League (RSL), the Lions and Rotary Clubs, and several sporting and recreation clubs including for equestrian activities, environmental conservation, sailing, pistol shooting, cricket, quilting, needle working, and writing. The Oberon Correctional Centre is a state run minimum-security prison facility in the locality of Gurnang approximately 40 km south of Oberon. The facility is located 23 km northeast from the approximate centre of the Project Area.

Crookwell and Goulburn are regional centres to the southwest and south of the Project Area. Both regional centres are located within similar travelling distances from the Project Area (refer to Error! Reference source not found.). Crookwell has a population of 2,105 while Goulburn is considerably larger with a population of 22,419. Similar in size and profile to Oberon, Crookwell is the largest centre in the Upper Lachlan LGA hosting the council offices. Medical services available in Crookwell include the Crookwell District Hospital and Auxiliary, the Child and Family Health Centre, and aged care outreach services. All major emergency services are present in Crookwell: NSW Police, Ambulance, Fire and Rescue, RFS, and the SES. Crookwell has two primary schools, one public and one private, and one public high school. A wide variety of community organisations are present in the town including the Country Women's Association (CWA), progress association and historical society, Lions and Rotary Clubs, an RSL and branch of the Goulburn Legacy Club, a branch of the Red Cross, and a Men's Shed.

Goulburn is the largest regional centre and a major hub on the Hume Highway and interstate rail line connecting Sydney—Canberra and Sydney—Melbourne. Goulburn has 11 public and private primary and secondary schools servicing its population. The Goulburn Base Hospital is a major medical facility offering a wide variety of medical services, while several medical practices are also located in the town. Goulburn also has a strong presence of all major emergency services and a wide variety of community organisations and recreational facilities.

Public health and education services in surrounding towns and regional centres which may support the construction phase of the Project are identified in **Table 5.5** and **Table 5.6**. Key health and education indicators across the Project's Social Locality are reported in **Table 5.7**.

Table 5.5 Public Health Services

Location	Public Health Service
Bathurst (Outreaches to Oberon on Mondays)	<ul style="list-style-type: none"> ■ CRS Australia - aids people who have been or are still suffering an injury or health condition to seek and regain employment through case management plans and physiotherapy, dietitians and occupational therapy.
Crookwell	<ul style="list-style-type: none"> ■ Community Gateway – tailored support from a Wellbeing Advisor ■ Crookwell District Hospital ■ Crookwell Child & Family Health Centre – managed by Crookwell Hospital.
Goulburn	<ul style="list-style-type: none"> ■ Goulburn Base Hospital ■ Goulburn Health Hub
Gunning	<ul style="list-style-type: none"> ■ Gunning District Community & Health Service – Non-government organisation which provides clinical and home support services to the community.
Oberon	<ul style="list-style-type: none"> ■ Oberon Hospital - Emergency Services available 24 hours per day include: child and family health, district nursing services, dietary advice, mental health and women's health, podiatry, physiotherapy, speech pathology and counselling, aged care services, meals on wheels and immunisation. ■ Regional Health Service - Community Health Centre providing weekly counselling services for a variety of issues including anxiety, depression, grief and loss, trauma, relationships, and domestic violence.

Table 5.6 Educational Facilities

Location	Educational Centre
Bathurst	<ul style="list-style-type: none"> ■ Central West Community College (Bathurst - integrated training, recruitment and community services)
Black Springs	<ul style="list-style-type: none"> ■ Black Springs Public School
Breadalbane	<ul style="list-style-type: none"> ■ Breadalbane Public School
Crookwell	<ul style="list-style-type: none"> ■ Crookwell Pre-School ■ Crookwell Mobile Children's Services ■ Crookwell Public School ■ St Mary's Catholic Primary School ■ Crookwell High School
Dalton	<ul style="list-style-type: none"> ■ Dalton Public School
Goulburn	<ul style="list-style-type: none"> ■ Goulburn Public School ■ Goulburn Public School
Gunning	<ul style="list-style-type: none"> ■ Gunning Early Learning Centre ■ Gunning Public School
Hampton	<ul style="list-style-type: none"> ■ Hampton Public School
Oberon	<ul style="list-style-type: none"> ■ Oberon Children's Centre ■ Oberon Public School ■ St Joseph's Central School ■ Oberon High School
O'Connell	<ul style="list-style-type: none"> ■ O'Connell Public School
Rockley	<ul style="list-style-type: none"> ■ Rockley Public School
Taralga	<ul style="list-style-type: none"> ■ Taralga Public School

Table 5.7 Key Health and Education Indicators across the Project's Social Locality

ABS Statistical Area	Census Year	Count of selected long-term health conditions: 0 / 1 / 2 / 3 or more conditions	Educational attainment year 12 or equiv.	Educational attainment, vocational training	Educational attainment, university
Oberon LGA 16100 (LGA)	2021	53.9% / 19.4% / 7.5% / 3.5%	***	-	-
	2016	*	11.9%	24.7%	9.7%
SA1 (in south Oberon LGA) 1106107 (SA1)	2021	34.4% / 13.8% / 4.0% / 1.2%	-	-	-
	2016	-	7.7%	13.0%	4.5%
Oberon 115107 (UCL)	2021	**	-	-	-
	2016	-	12.3%	23.8%	6.6%
Upper Lachlan LGA 17640 (LGA)	2021	54.4% / 22.5% / 7.9% / 4.5%	-	-	-
	2016	-	10.9%	28.3%	12.2%
SA1 (in north Upper Lachlan LGA) 1154018 (SA1)	2021	56.3% / 22.6% / 8.2% / 4.1%	-	-	-
	2016	-	9.7%	33.5%	16.5%
Taralga 122136 (UCL)	2021	-	-	-	-
	2016	-	8.6%	22.7%	10.4%
Crookwell 115044 (UCL)	2021	-	-	-	-
	2016	-	11.2%	27.4%	8.2%
Goulburn Mulwaree LGA 13310 (LGA)	2021	55.1% / 21.2% / 8.4% / 4.8%	-	-	-
	2016	-	11.2%	28.7%	11.5%
Goulburn 112008 (UCL)	2021	-	-	-	-
	2016	-	11.4%	27.7%	10.7%
NSW Code 1 (STE)	2021	64.9% / 18.3% / 5.7% / 3.0%	-	-	-
	2016	-	15.3%	23.7%	23.4%

*Count of select long-term health conditions was not reported in the 2016 Census Quick-stats.

** ABS UCL data from the 2021 Census will be released on 12 October 2022.

***Educational attainment data will be released on 12 October 2022.

5.6 Access and Connectivity

The Project Area bisects the council-maintained road of Abercrombie Road, linking the towns of Oberon and Goulburn and changing its name to Taralga Road at the crossing with the Abercrombie River to the south of the Project Area (at the LGA boundary). The Upper Lachlan Shire approximately two and a half hours from Sydney, ideally located with main roads leading north to the Central West, South to the Canberra region and west to the Riverina, making the route a popular drive and destination for tourists, bringing economic activity into the area.

Attractions such as the collection of nineteenth century buildings, emerging foodie scene, the Wombeyan Caves, historic walking trails and alpaca farms assist with bringing tourists to visit the region.

Oberon and Upper Lachlan are serviced by Bathurst (BHS) Airport for aviation services. In addition, Oberon is also serviced by the Intercity Train, which operates from Central Station to Tarana Station four times a day, the NSW TrainLink operates services twice daily and a bus is available from Orange to Oberon via Lucknow Coach Stop, Mitchell Hwy and Bathurst Station.

The Oberon Community Transport Service provides additional transport services for people with disabilities to and from medical appointments and social events with the trips generally restricted to an area bounded by Orange to the west and Sydney to the east. There are also taxi and mini bus services available in both Oberon LGA and Upper Lachlan LGAs.

5.7 Aboriginal Cultural Heritage

The Oberon Shire LGA is situated along the border of the traditional lands of the Gundungurra and Wiradjuri peoples. The Project Area, which is within the southern portion of the Oberon Shire LGA, sits predominantly within Gundungurra lands.

There is anecdotal evidence to suggest that Aboriginal people were occupying the region year round, with European explorers noting sightings of local tribes in May of 1819 (Gemmell-Smith 2004). The Gundungurra people of the Burra Burra band inhabited the area around Oberon, *“from the Abercrombie to Taralga and Carrabungla”* (Macalister 1907).

Gundungurra people would have utilised aquatic and terrestrial resources for subsistence, including fish and shellfish, yams, tubers, and medicinal plants, and goanna, kangaroo, possum and waterfowl. Gundungurra lands contained a number of scarred trees, some showing evidence of resource gathering, the majority of which are likely to have been removed through land clearance. It is also indicated by Gundungurra elders that carved trees were used to mark ceremonial areas and sacred sites, including burials. The Oberon area also contains source material sites and evidence of stone quarrying, primarily for the manufacturing of various types of stone tools.

Archaeological investigations have revealed a number of archaeological sites located within the Project Area, the majority of which are artefact scatters of low density, with some medium density scatters and two modified trees. Regarding the social or cultural significance of the Project Area, limited feedback was received from Registered Aboriginal Parties (RAPs) during or following field. Feedback provided noted the cultural significance of scarred trees within the Project which were noted as direction markers towards ancestral burials. No additional comment on social value was provided. It is however noted that generally all evidence of past Aboriginal land use is recognised by the RAPs as demonstrating social significance as a tangible connection to the past. The Project Area is considered to contain moderate social value.⁶

5.8 Community Values

Oberon is a small rural community and remains dependent on its rural industries including timber, beef cattle and horticultural industries, which provide jobs and prosperity to the community. Outdoor pursuits include the Jenolan Caves, Mayfield, climate gardens, camping sites and snow activities which are popular for locals and tourists (Oberon Council 2022). Oberon has an active cultural community embracing the arts, music and drama with artists' studios that can be visited, theatre workshops and Kowmung Music Festival (Oberon Council 2022).

The Upper Lachlan Shire is known for wool, potato production and picturesque countryside. Major changes are occurring in Upper Lachlan as a result of people leaving large cities for country lifestyle changes, as well as, tourism becoming the third major industry in the Shire, behind the traditional agricultural industries and retail (Upper Lachlan Shire 2022).

The stakeholder engagement conducted for the Project indicates that community values most strongly resonate with the natural environment, farming, and community and family. The region's natural landscape, rolling hills and Abercrombie River environs are particularly valued.

⁶ Adapted from the Cultural Heritage Assessment Report.

6. SOCIAL IMPACT ASSESSMENT AND MANAGEMENT

As outlined in **Section 2.3**, the impact assessment methodology follows that outlined in DPE's Technical Supplement (2021b). Overall, the key drivers of social change that may affect communities in the Social Locality resulting from the Project relate to:

- procurement opportunities for local businesses and employment opportunities for the local workforce;
- opportunities for diversification of income streams for host land owners;
- disruptions due to construction related activities (noise, dust, transportation of materials and workers, etc);
- accommodation arrangements for construction workforce; and
- amenity (noise, visual) and other land use and landscape changes due to altered landscapes.

Technology to support renewable energy projects is continuously evolving and improving. Accordingly, following the 30 year operational timeframe, components of the wind farm may be upgraded to prolong the life of operation, or decommissioned and the land returned to the original land use. Given the timeframe involved, the Decommissioning Phase has not been assessed in this SIA. It is noted that the potential social impacts associated with the decommissioning of the Project will be considered as part of a future Decommissioning Plan (or similar).

In assessing the potential impacts, ERM has considered the:

- characteristics of the Project, including the timing, duration and intensity of activities (where known);
- issues raised by stakeholders during the engagement process; and
- outcomes from technical studies undertaken by the Project (noise, visual, cultural heritage etc.).

The impacts have been assessed based on the likelihood of the impact occurring, the magnitude of the impact (degree of change caused by the impact) if it occurs, and the vulnerability of the impacted receptors (refer to **Section 2**).

6.1 Description of Social Impact Mitigations Already Undertaken

This section describes historical Project refinements and design changes which have been made in response to community and other stakeholder feedback, or any other Project changes which have been undertaken to mitigate potential future social impacts.

As noted in **Section 4.1**, Union Fenosa Wind Australia Pty Ltd (later GPG) originally lodged a Preliminary Environmental Assessment in 2010 for the construction, operation and maintenance of up to 59 wind turbines and ancillary infrastructure. Consultation took place in late May 2011 and early June 2011, which included a door knock for immediate neighbouring landowners within 5-10 km of the Project Area. An EIS was submitted in 2014, reducing the number of turbines to 55 based on community feedback and consultation.

Considering advancements in design of wind turbine technology since the original submission, the current application includes a further reduction in the number of turbines from 55 to 47. In addition to the reduction in the number of turbines, major changes to the design in response to community feedback included micrositing of Project infrastructure.

6.1.1 Micrositing of WTGs

An indicative wind turbine layout was prepared as part of the EIS. The layout has been revised on several occasions since 2010, as a consequence of specialist studies and stakeholder input. The layout amendments included:

- Selection of the northern transmission line as the least impact option;
- Removal of the southern substation;
- Removal of turbine P26* to reduce potential noise impact for landowners;
- Removal of turbines P2, P6, and P7* in response to the flora and fauna assessment;
- Removal of turbine P11*, associated crane pad and access track;
- Relocation of turbine P10* by 184m, reduced access track;
- Relocation of turbine P13 and P14, reduced access track, less clearing for crane pad;
- Micrositing of the turbines to minimise local impacts;
- Changes to the location of several access tracks to further utilise the existing farm tracks and reduce the infrastructure footprint;
- More underground cabling to provide more efficient transfer of electricity and reduce the infrastructure footprint;
- A new access road to separate the wind farm construction vehicle traffic from the access used by the project involved landowners;
- Selecting a smaller wind turbine envelope size for specific locations to reduce potential noise and shadow flicker impact for the project involved landowners;
- New substations to reduce length of overhead powerlines;
- Selection of powerline poles for the northern transmission line route to minimise and avoid where possible the removal of native vegetation; and
- Revised site footprint. The north eastern end of the project has been extended and includes substation options A and B, and turbines PY42, 43, 45, 46 and 47.

* Turbine numbers refer to micrositing from site layout prior to revision in 2021, the turbines have since been renamed (PY1-PY47).

6.1.2 Transmission Line

Concerns were initially raised by Project stakeholders in relation to the proposed powerline options, and the uncertainty around which option was to be used. The north-eastern option was selected for the Project, and comprised an approximate 9 km overhead powerline connection of to a proposed off-site electrical terminal station. The terminal station would then connect to the Mt Piper to Bannanby 500 kV transmission line that passes north-east and east of the site.

6.1.3 Viewing Platform

On request from Oberon Council, the Project will also to include a viewing platform within the site boundary adjacent to the Abercrombie Road corridor to allow the public to safely pull over off the road to better view of the wind farm from the designated viewing area. The viewing platform location is to be determined in consultation with Oberon Council.

6.2 Key Impacts and Mitigations

Several key impacts were identified through the assessment process, which are presented in the sections that follow. These impacts were also reflected as key concerns during stakeholder engagement undertaken through several iterations of the Project with key stakeholders, as well as understood based on experience with similar recent wind farm projects in NSW (refer to **Section 4** for additional information relating to stakeholder engagement).

The key impacts and mitigations are further summarised in **Table 6.9**.

6.2.1 Construction Phase

Stakeholder and Community

During stakeholder engagement feedback was received from some members of the community with concerns about the type and extent of Project information available. This feedback included concerns in relation to the general level of community understanding about the Project, preferences for hard-copy communication materials over electronic communications, preferences around venue locations for community information sessions and formats (e.g. presentations with Q&A rather than drop-in sessions, and feedback on the use of surveys (refer to **Section 4**).

As the Project moves into the construction phase more transparent and inclusive engagement can be achieved through further development and implementation of Construction Phase specific elements of the Project Stakeholder Engagement Plan (SEP). This will include regular Project updates provided across a variety of platforms (e.g. electronic and hard-copy communication materials) and where relevant will seek input from stakeholders on issues that may affect them and which they may influence. The Project will also develop and implement a grievance mechanism to deal with any concerns that may arise including during day-to-day construction activities.

Table 6.1 Construction Phase: Stakeholder and Community

Potential Impact	Stakeholders	Magnitude	Likelihood	Impact Significance	Mitigation Measures / Enhancement Opportunities
Project engagement is not transparent and inclusive. Stakeholders do not feel they have been heard and are unable to influence Project decisions.	Project Neighbours, Wider Community	Moderate	Possible	Medium	<ul style="list-style-type: none"> ■ Develop and implement a SEP. ■ Develop and implement a grievance mechanism to ensure that road user concerns/ complaints are identified and acted upon.

Employment and Procurement

One of the key Project benefits perceived by the local community is local jobs and related training opportunities. Increased demand for labour creates not only creates direct employment opportunities but also has spill-over effects generating indirect employment in the local community. This benefit is furthered enhanced by local procurement of goods and services required during the Construction Phase.

Gillespie Economics' (2022) Economic Assessment indicates that during construction 50 full-time equivalent jobs are anticipated to be created. With an expected 85% of these sourced from within the region, this is expected to generate 94 direct and indirect jobs with the region rising to 152 direct and indirect jobs in NSW. It is anticipated this will equate to \$7 m in annual direct and indirect household income regionally rising to \$19 m in annual direct and indirect household income for the NSW economy.

In order to take advantage of these opportunities, the Project will develop and implement a Local Employment Plan. The plan will establish incentives for Engineering, Procurement and Construction (EPC) contractor recruitment to preference regional residents where they have the required skills and experience. The plan will also require Project participation in business group meetings, events or programs in the regional community which can assist prospective local employees and businesses with becoming job-ready. The Project will also develop and implement a Local Content Plan which establishes incentives for EPC contractor to preference procurement of local non-labour inputs to production where local producers can be cost and quality competitive.

Economic benefits notwithstanding, however, the Project also may potential impact the availability of skills within the region. This can occur when a large proportion of skilled workers available in a region are employed on a single large Project. In order to mitigate this, the Project will be attentive to skills shortages within the region, through ongoing communication with Oberon and Upper Lachlan Shire Councils and local business groups, and take this into consideration in recruitment decisions in consultation with the EPC. These communications should be reflected in the SEP.

Table 6.2 Construction Phase: Employment and Procurement

Potential Impact	Stakeholders	Magnitude	Likelihood	Impact Significance	Key Mitigation Measures / Enhancement Opportunities
Direct and indirect employment opportunities.	Livelihoods: Local Workforce	Major	Likely	High	<ul style="list-style-type: none"> Develop and implement a Local Employment Plan which includes local employment incentives for the EPC Contractor. Work with the EPC Contractor during construction to achieve maximum local employment.
Contribution to skills shortages	Livelihoods: Local Businesses	Minor	Possible	Medium	<ul style="list-style-type: none"> Monitor for skills shortages within the region and take this into consideration with EPC recruitment objectives.
Local procurement opportunities	Livelihoods: Local Businesses	Major	Likely	High	<ul style="list-style-type: none"> Develop and implement a Local Content Plan which includes local procurement incentives for the EPC Contractor. Work with the EPC Contractor to achieve maximum local economic impact.

Local Disruptions

During stakeholder engagement a number of concerns were raised regarding local disruptions during construction. These included disruptions to farming practices ranging from biosecurity risks to farm access impacts, and interruptions to daily life due to construction traffic and component delivery (e.g. blades) estimated to be up to 20 vehicle movements per day over a 22-month construction period (SLR 2022b), and other construction impacts including but not limited to noise and vibration, and local road deterioration.

In order to address these concerns the following mitigations should be implemented as a priority:

- Develop and implement a SEP requiring frequent communication around local impacts arising from construction related activities and includes a grievance mechanism ensuring prompt addressing of local concerns raised during construction.

- Develop and implement a Construction Environmental Management Plan that will include specific mitigations for construction phase impacts including but not limited to noise and vibration (SLR 2022a), dust and air quality, and relevant monitoring measures.
- Develop and implement a traffic management plan which draws on the Project Traffic Impact Assessment's analysis (SLR 2022b).

Table 6.3 Construction Phase: Local Disruptions

Potential Impact	Stakeholders	Magnitude	Likelihood	Impact Significance	Key Mitigation Measures / Enhancement Opportunities
Disruptions to farming practices because of Project construction.	Livelihoods: Local Businesses	Minor	Possible	Medium	<ul style="list-style-type: none"> ■ Monitor for skills shortages within the region and take this into consideration with EPC recruitment objectives.
Increased disruption, congestion and wear and tear on local roads causing inconvenience and safety impacts for road users	Health and Wellbeing: Host Landowners, Project Neighbours, Wider Community, Visitors to the Region	Major	Likely	High	<ul style="list-style-type: none"> ■ Develop and implement a Traffic Management Plan. ■ Develop and implement a SEP to engage surrounding landowners and understand traffic movements and local road use patterns and preferences. ■ Repair damage to Council roads and/or upgrade roads as required in accordance with Council Engineering Standards. ■ Develop and implement a grievance mechanism to ensure that concerns/ complaints are identified and acted upon.
Interruptions to daily life because of Project construction	Way of Life: Host Landowners, Project Neighbours, Wider Community	Major	Likely	High	<ul style="list-style-type: none"> ■ Develop and implement a Construction Environmental Management Plan. ■ Develop and implement a Traffic Management Plan as above. ■ Develop and implement a SEP.
Construction environmental impacts, including noise, vibration, dust, visual amenity, and increased risk of fire.	Health and Wellbeing: Host Landowners and Project Neighbours	Major	Likely	High	<ul style="list-style-type: none"> ■ Develop and implement a Construction Environmental Management Plan. ■ Develop and implement a Traffic Management Plan as above. ■ Develop and implement a SEP.

Accommodation and Worker Influx

Large construction projects have the potential to contribute to tight rental markets if large construction workforces are brought into the area. This can increase the demand for short and long-term accommodation, which in turn can exacerbate accommodation shortages and cost of living pressures through increased rents in areas with low vacancy rates. As the Project plans to recruit 85% of the construction workforce from the region, this impact is unlikely to occur. However, if this recruitment goal is not realised then the Project has the potential to generate this impact.

Under these circumstances, additional potential impacts may be experienced in the availability of short term and tourist accommodation, and in increased demand for social and emergency services and recreational facilities due to temporary population increase. If local recruitment goals are not met, the Project should consider developing and implementing a workforce accommodation management plan to address these concerns. The workforce accommodation management plan should consider alternative arrangements such as a worker accommodation camp taking into consideration the low vacancy rates reported in nearby towns, and should also consider workforce behavioural standards in a worker code of conduct should a large outside workforce be required.

Table 6.4 Construction Phase: Accommodation and Worker Influx

Potential Impact	Stakeholders	Magnitude	Likelihood	Impact Significance	Key Mitigation Measures / Enhancement Opportunities
Potential increase in demand for short and long-term accommodation if local recruitment goals are not met.	Way of Life: Local Businesses, Visitors to the Region	Minor	Possible	Medium	<ul style="list-style-type: none"> Develop and implement a Local Employment Plan which includes incentives for the EPC to reach the desired local recruitment goals. Monitor for achievement of local recruitment goals and, if goals are not realised, consider developing and implementing a Workforce Accommodation Management Plan to manage potential impacts from worker influx.
Increased demand for social and emergency services and recreational facilities if local recruitment goals are not met.	Access: Wider Community	Minor	Possible	Medium	<ul style="list-style-type: none"> Develop and implement a Local Employment Plan which includes incentives for the EPC to reach the desired local recruitment goals. Monitor for achievement of local recruitment goals and, if goals are not realised, consider developing and implementing a Workforce Accommodation Management Plan to manage potential impacts from worker influx.

6.2.2 Operation Phase

Employment and Procurement

Ongoing employment during the Operation Phase of the Project was noted as an interest during stakeholder engagement. During the Operation Phase the Project is expected to generate 43 direct and indirect jobs regionally and 65 direct and indirect jobs in NSW. It is anticipated this will equate to \$3 m in annual direct and indirect household income regionally rising to \$8 m in annual direct and indirect household income for the NSW economy (Gillespie Economics 2022). These figures include benefits arising through procurement of goods and services required during operation as well as the benefits of the diversification of income streams for the host landowners who are typically operating as rural businesses.

In order to maximise these benefits, the Project should extend the **Local Employment Plan** and **Local Content Plan** developed during the Construction Phase into the Operation Phase.

Table 6.5 Operation Phase: Employment and Procurement

Potential Impact	Stakeholders	Magnitude	Likelihood	Impact Significance	Key Mitigation Measures / Enhancement Opportunities
Direct and indirect jobs will be created due to the Project.	Livelihoods: Local Workforce	Major	Likely	High	<ul style="list-style-type: none"> ■ Develop and implement a Local Content Plan which includes local employment goals for the Operation Phase. ■ Develop and implement a Local Content Plan which includes local procurement goals for the Operation Phase.
Demand for locally procured goods and services during the operation phase of the Project.	Livelihoods: Local Businesses	Major	Likely	High	
Diversification of income streams for rural businesses (host landowners).	Livelihoods: Local Businesses	Major	Almost Certain	Very High	<ul style="list-style-type: none"> ■ Enact host landowner agreements as agreed.

Land Use and Landscape

A variety of land use and landscape related impacts were raised during stakeholder engagement, reflecting similar concerns voiced across similar wind farm projects in other regions of NSW and Australia. These included perceived impacts on land values, altered rural character particularly visual amenity impacts. Additional concerns include electromagnetic interference to satellite/Global Positioning Systems (GPS) and/or radio signals, aircraft safety during aerial agriculture and water bombing for fire suppression activities, and potential impacts on tangible and intangible Aboriginal Heritage resulting from the Project.

The perception that property values will decrease is linked to the other impacts including shadow flicker, noise, agricultural operations impacts including aerial spraying, and visual amenity. This concern is not supported by studies that have investigated the issue (Urbis 2016). The Project should manage this impact through development and implementation of a SEP which includes a complaints mechanism, so that community concerns can be identified and actively addressed.

Due to the height and placement of wind turbines, visual impacts are likely to occur, as the turbines are likely to disrupt the rural landscape. A visual impact assessment was conducted by Moir Landscape Architecture (2022) to determine the visual influence of the wind turbines. The assessment considered impacts to dwellings nearby and to the general public from a number of locations, and considered mitigations in terms of turbine location and micro-siting and residual impact mitigations which typically involve screening plantings. A number of recommendations were made which would inform a Project Landscaping Plan for further consultation with impacted dwellings. Neighbour Agreements will also be pursued to help distribute Project benefits and further mitigate amenity impacts.

A shadow flicker and blade glint assessment was conducted for the Project (DNV 2022). Blade glint is the bright reflection caused by the sun on the turbine blades and towers, creating a glint while shadow flicker is the moving shadow caused by the sun from the rotating blades of a wind turbine. Due to the movement of the blades, the shadow moves and creates flickers of light and shadow. However, modern wind turbines are typically coated with non-reflective paint which significantly reduces blade glint associated impacts. It is expected that shadow flicker impacts will likely exceed the limits proposed in the NSW Wind Energy Guideline (DPE 2016). Accordingly, it is recommended that the Project engage with the affected stakeholder dwellings to make sure they are suitably aware of the shadow flicker impacts they may experience and to discuss appropriate mitigations and a negotiated agreement that the mitigations are acceptable.

Electromagnetic interference is the potential disruption or interference with the effective performance of an electronic device, such as communication networks, electrified railways, and computer networks. Wind farms can cause electromagnetic interference due to the location and size of the WTGs, characteristics of the rotor blade, and characteristics of the signal such as frequency and the receiver (Florian and Basian 2009; Sengupta and Thomas 2009). An electromagnetic interference impact assessment should be conducted to identify relevant potential impacts and associated mitigations.

The installation of wind turbine infrastructure has the potential to interrupt aerial activities such as crop spraying and firefighting. An aircraft exclusion zone is typically established around wind turbines. With the implementation of an exclusion zone, aerial spraying would not be allowed close to the turbine locations. The Aviation Impact Assessment (Aviation Projects 2021) considered impacts to commercial aviation but did not consider potential local aviation impacts, instead recommending further consultation with local aerial operators to develop procedures in the vicinity of the Project. This future engagement should be captured in the Project SEP.

The Project Area has been subject to three Aboriginal Cultural Heritage assessments, undertaken in 2005, 2013 and 2022 (ERM 2022). The 2005 assessment identified 14 Aboriginal sites, while the 2013 assessment identified a further eight sites. These sites comprised artefact scatters and isolated finds, and were assessed as having low to moderate significance (in relation to scientific, aesthetic and historical values), and high significance (in relation to social/cultural values). The 2022 field survey was unable to identify any of the objects recorded during the 2005 or 2013 surveys; however, 17 new sites were recorded. Of these, a total of 12 sites (13 with indirect) would be subject to direct impacts associated with the Project. To manage these potential impacts, a Cultural Heritage Management Plan will be developed and implemented and include the following mitigations: cultural awareness inductions for workers, surface collection of artefact scatters, staged salvage excavation, archaeological monitoring, chance finds procedure, repatriation of archaeological material post-construction, and consultation with the local Aboriginal community to seek endorsement of these recommendations (ERM 2022).

Table 6.6 Operation Phase: Land Use and Landscape Impacts

Potential Impact	Stakeholders	Magnitude	Likelihood	Impact Significance	Key Mitigation Measures / Enhancement Opportunities
Perceived potential impacts to neighbouring land values	Livelihoods: Host Landowners and Project Neighbours	Moderate	Unlikely	Medium	<ul style="list-style-type: none"> Foster open communication with surrounding landowners in order to understand land devaluation concerns. Develop and implement a grievance mechanism, so that community concerns can be identified and actively managed.
Altered rural character, including visual amenity impacts.	Surroundings: Host Landowners, Project Neighbours, Wider Community, Visitors to the Region	Transformational	Almost Certain	Very High	<ul style="list-style-type: none"> Project Developer to undertake localised visual impact assessment where merited (including properties that may have previously declined a visual impact assessment).

Potential Impact	Stakeholders	Magnitude	Likelihood	Impact Significance	Key Mitigation Measures / Enhancement Opportunities
Aircraft safety associated with the WTG locations and tip heights.	Livelihoods: Host Landowners, Project Neighbours, Emergency Services	Minor	Possible	Medium	<ul style="list-style-type: none"> Conduct an updated Aerial Assessment for the amended turbine layout in order to confirm the impact on fixed-wing aircraft usage near WTGs.
Altered landscapes have the potential to impact tangible and intangible Aboriginal heritage.	Culture: Traditional Owners	Moderate	Possible	Medium	<ul style="list-style-type: none"> Develop and Implement a Cultural Heritage Management Plan.

Stakeholder and Community

Strong interest in the community benefits associated with the Project was expressed during stakeholder engagement. This included queries about the nature and purpose of the fund, and eligibility, and suggestions for community funding initiatives such as enhancing electricity security, installation of electric vehicle charging stations, and provision of university and vocational training scholarships. The Project has committed to establishing the Oberon Community Enhancement Fund, but more detailed planning for the fund is to be completed. Despite the strong interest in community benefits, community opinions about the desirability of the Project remain divided with just over half of the community either strongly or moderately supporting the Project. This indicates an existing division of opinion within the community and the possibility that the Project could negatively impact community cohesion if not managed appropriately.

In addition to the land use and landscape amenity impacts described above, a number of real or perceived adverse potential health impacts associated with WTG operation may be experienced. Surrounding landholders identified that the health impacts associated with wind farm developments was of concern. This concern primarily related to the perceived short and long-term physical and mental health impacts for humans and livestock linked to noise emissions.

As is commonly expressed in connection with wind farm developments, stakeholders feel that there is inadequate scientific evidence regarding the potential negative health impacts from wind farms, particularly as wind farm technology is relatively new and evolving. As such, there is a concern that the full extent of health impacts have not been researched or identified.

A noise impact assessment has been completed for the Project (SLR 2022a). The assessment determined that noise emissions from WTG operation at full noise emission level slightly exceeded the South Australia Environmental Protection Agency (SA EPA) criteria of 35 dBA at two non-involved receptors, and exceeded the World Health Organisation (WHO) criteria of 45 dBA at eight Project involved receptors. However, when the WTGs are operated at a reduced noise management mode, the relevant criteria are met at all locations. Similarly the transformer substation operation is expected to meet all relevant noise emission criteria. The noise impact assessment does however recommend more nuanced noise mitigation planning is undertaken for both the construction and operation phases during detailed design (SLR 2022a).

Table 6.7 Operation Phase: Stakeholder and Community Impacts

Potential Impact	Stakeholders	Magnitude	Likelihood	Impact Significance	Key Mitigation Measures / Enhancement Opportunities
Development of the Oberon Community Enhancement Fund.	Community: Wider Community	Major	Almost Certain	Very High	<ul style="list-style-type: none"> Develop and implement the Oberon Community Enhancement Fund, consulting with key stakeholders and potential partners (e.g. Oberon LGA, community groups, etc.).
Impacts to community cohesion through divided opinions about the desirability of the Project in the community.	Community: Project Neighbours, Wider Community	Moderate	Likely	High	<ul style="list-style-type: none"> Publish the Oberon Community Enhancement Fund to the wider community via community newsletters and other communications channels as per the SEP.
Real or perceived adverse potential health impacts associated with windfarm operation	Health and Wellbeing: Host Landowners and Project Neighbours	Major	Likely	High	<ul style="list-style-type: none"> Develop and implement an Operational Environmental Management Plan. Develop and implement a SEP. Communicate the outcomes of relevant assessments such as the blade glint, shadow flicker, electromagnetic interference, and operational noise assessments and proposed technical mitigation measures (if required).
Increased tourism to the local area.	Community: Local Communities	Moderate	Possible	Medium	<ul style="list-style-type: none"> Install the public viewing platform as requested by the Oberon LGA.

Cumulative Impacts

Cumulative social impacts arising from an additional project in the wider Central West and Orana region are possible as NSW pursues largescale transition to renewable energy sources (NSW Government 2019, 2020, 2021), and are an area of particular concern that has been raised by stakeholders. However, as the Project is located in a somewhat isolated region to the south of the main areas of development, cumulative impacts are not expected to be significant.

Moir Landscape Architecture's (2022) Landscape and Visual Impact Assessment considered cumulative impacts from the perspectives of whether multiple wind farms might be simultaneously visible, particularly the Taralga Wind Farm located approximately 25 km to the south of the Project and the Crookwell 1, 2 and 3 wind farms located approximately 37 km southwest of the Project. The assessment also considered cumulative impacts that might be experienced by persons moving across the landscape.

Table 6.8 Operation Phase: Cumulative Impacts

Potential Impact	Stakeholders	Magnitude	Likelihood	Impact Significance	Key Mitigation Measures / Enhancement Opportunities
Cumulative socio-economic impacts from an additional project in the region.	Surroundings: Wider Community	Moderate	Possible	Medium	<ul style="list-style-type: none"> ■ Develop and implement a Local Employment Plan. ■ Monitor for achievement of local recruitment goals and, if goals are not realised, consider developing and implementing a workforce accommodation management plan.
Cumulative visual amenity impacts from an additional project associated with the region.	Surroundings: Wider Community	Moderate	Possible		<ul style="list-style-type: none"> ■ Apply mitigations as appropriate as recommended by Moir Landscape Architecture (2022).

6.3 Summary of Project Impact Assessment and Associated Mitigations

Table 6.9 provides an overall summary of the social impacts identified in relation to the Project, as discussed in the proceeding sections. A residual impact significance rating has also been determined for each impact. This rating represents the potential impact likely to be experienced subsequent to the implementation of the identified mitigation measures / enhancement opportunities.

Table 6.9 Summary of Project Impact Assessment and Associated Mitigations

Project Activities and Potential Impacts	Impact Category and Stakeholders Affected	Impact Characteristics					Pre-Mitigation/ Enhancement Rating			Mitigation Measures / Enhancement Opportunities	Post-Mitigation / Enhancement (Residual Rating)		
		Extent	Duration	Severity	Intensity	Level of Concern/ Interest	Magnitude of Impact	Likelihood	Impact Significance		Residual Magnitude of Impact	Residual Likelihood	Residual Impact Significance
Construction Phase													
Stakeholder and Community													
Project engagement is not transparent and inclusive. Stakeholders do not feel they have been heard and are unable to influence Project decisions.	Decision-making Systems: Project Neighbours, Wider Community	Low	Medium	Medium	Medium	Medium	Moderate	Possible	Medium	<ul style="list-style-type: none"> Develop and implement a SEP. Develop and implement a grievance mechanism to ensure that road user concerns/ complaints are identified and acted upon. 	Moderate	Unlikely	Low
Employment and Procurement													
Increased demand for labour creates direct and indirect employment opportunities for the local community.	Livelihoods: Local Workforce	Medium	Medium	High	High	High	Major	Likely	High	<ul style="list-style-type: none"> Create awareness amongst the community, in partnership with LGAs and other partner organisations to foster a better understanding as to the ways prospective workers may be able to take part in the Project. This awareness can be generated through the use of a Project specific website and through existing communication channels within the LGAs. Develop and implement a Local Employment Plan which includes local employment incentives for the EPC Contractor. Work with the EPC Contractor during construction to achieve maximum local employment. 	Major	Likely	High
Increased demand for labour creates skills shortages. Other businesses in the region cannot find the skilled employees they need to operate their businesses due to the presence of the Project.	Livelihoods: Local Businesses	Medium	Medium	Low	Low	Low	Minor	Possible	Medium	<ul style="list-style-type: none"> Monitor for skills shortages within the region and take this into consideration with EPC recruitment objectives. 	Minor	Unlikely	Low
Increased demand for goods and services helps to stimulate the local economies. Businesses within the Social Locality benefit from increased economic activity associated with the construction workforce and Project material requirements.	Livelihoods: Local Businesses	Medium	Medium	High	High	High	Major	Likely	High	<ul style="list-style-type: none"> Create awareness amongst the community, in partnership with LGAs and other partner organisations to foster a better understanding as to the ways local businesses may be able to take part in the Project. This awareness can be generated through the use of a Project specific website and through existing communication channels within the LGAs. Develop and implement a Local Content Plan which includes local procurement incentives for the EPC Contractor. Work with the EPC Contractor to achieve maximum local economic impact through targeted procurement of local goods and services. <p>Work with EPC Contractor to track and report on the local content used for the Project in order to demonstrate the extent to which local content is being accessed.</p>	Positive	High	High

Project Activities and Potential Impacts	Impact Category and Stakeholders Affected	Impact Characteristics					Pre-Mitigation/ Enhancement Rating			Mitigation Measures / Enhancement Opportunities	Post-Mitigation / Enhancement (Residual Rating)		
		Extent	Duration	Severity	Intensity	Level of Concern/ Interest	Magnitude of Impact	Likelihood	Impact Significance		Residual Magnitude of Impact	Residual Likelihood	Residual Impact Significance
Local Disruptions													
Disruptions to farming practices because of Project construction. Construction activities may limit access and cause temporary inconveniences for the operation of rural properties, such as stock movements, paddock access, etc.	Livelihoods: Host Landowners and Project Neighbours	Low	Low	Medium	Medium	Medium	Moderate	Possible	Medium	<ul style="list-style-type: none"> Develop and implement a SEP that includes engaging surrounding landowners to understand periods for cropping and livestock movements. Through the SEP provide regular updates about upcoming construction activities that might impact landowners annual seeding, harvesting and stock movement plans. Develop and implement a grievance mechanism to ensure that concerns/ complaints are identified and acted upon. Develop and implement a Construction Environmental Management Plan. 	Minor	Possible	Medium
Transportation of materials and equipment to the Project Area has the potential to cause road traffic inconvenience and safety impacts for road users along the haulage routes to site and on local roads. Risk of traffic injury or in the worst case a fatality, resulting from increased vehicle movements during the transportation of goods and workers to and from the site.	Health and Wellbeing: Host Landowners, Project Neighbours, Wider Community, Visitors to the Region	Medium	Low	High	High	High	Major	Likely	High	<ul style="list-style-type: none"> Develop and implement a Traffic Management Plan. Repair damage to Council roads and/or upgrade roads as required in accordance with Council Engineering Standards, outline these commitments in the Traffic Management Plan, which includes but is not limited to: <ul style="list-style-type: none"> Ensure drivers observe road traffic rules and speed limits; Ensure all vehicle drivers have a relevant licence and training before mobilisation; Use road signs at strategic points, sirens and public announcements where necessary to warn people of oncoming heavy vehicles; Ensure all vehicles are certified roadworthy and well maintained; and Avoid night driving to the extent possible. Develop and implement a SEP to engage surrounding landowners and understand traffic movements and local road use patterns and preferences. Develop and implement a grievance mechanism to ensure that concerns/ complaints are identified and acted upon. 	Moderate	Likely	High
Increased disruption, congestion and wear and tear on local roads, leading to frustration by road users and requirement for more frequent repairs.	Health and Wellbeing: Host Landowners, Project Neighbours, Wider Community, Visitors to the Region	Medium	Medium	Medium	Medium	High	Major	Likely	High	<ul style="list-style-type: none"> Develop and implement a SEP to engage surrounding landowners and understand traffic movements and local road use patterns and preferences. Develop and implement a grievance mechanism to ensure that concerns/ complaints are identified and acted upon. 	Moderate	Possible	Medium
Interruptions to daily life because of Project construction. Daily life impacts, such as traffic changes, school buses, mail deliveries, utilities interruptions, etc. arising from increased construction traffic and local road upgrades.	Way of Life: Host Landowners, Project Neighbours, Wider Community	Medium	Medium	High	High	High	Major	Likely	High	<ul style="list-style-type: none"> Develop and implement a SEP to engage surrounding landowners and understand traffic movements and local road use patterns and preferences. Develop and implement a grievance mechanism to ensure that concerns/ complaints are identified and acted upon. 	Moderate	Likely	High
Construction environmental impacts, including noise, vibration, dust, visual amenity, and increased risk of fire. Various impacts resulting from construction activities, generally felt by people living in proximity to construction activities, such as degradation of air quality and health impacts as a result of increased generation of dust and particles from land clearing, and the use of heavy vehicles and equipment.	Health and Wellbeing: Host Landowners and Project Neighbours	Medium	Medium	High	High	High	Major	Likely	High	<ul style="list-style-type: none"> Develop and implement a Construction Environmental Management Plan which includes but is not limited to: <ul style="list-style-type: none"> Dust management; Construction hours align with statutory requirements / approvals; Conduct HSE awareness training where appropriate; Bushfire risk management; and Biosecurity risk management. Develop and implement a Traffic Management Plan as above. Develop and implement a SEP. Develop and implement a grievance mechanism to ensure that road user concerns/ complaints are identified and acted upon. 	Moderate	Possible	Medium

Project Activities and Potential Impacts	Impact Category and Stakeholders Affected	Impact Characteristics					Pre-Mitigation/ Enhancement Rating			Mitigation Measures / Enhancement Opportunities	Post-Mitigation / Enhancement (Residual Rating)		
		Extent	Duration	Severity	Intensity	Level of Concern/ Interest	Magnitude of Impact	Likelihood	Impact Significance		Residual Magnitude of Impact	Residual Likelihood	Residual Impact Significance
Accommodation and Worker Influx													
Potential increase in demand for short and long-term accommodation if local recruitment goals are not met.	Way of Life: Local Businesses, Visitors to the Region	Low	Medium	Low	Medium	Medium	Minor	Possible	Medium	<ul style="list-style-type: none"> Develop and implement a Local Employment Plan which includes incentives for the EPC to reach the desired local recruitment goals. 	Minor	Unlikely	Low
Increased demand for social and emergency services and recreational facilities based on the temporary increase in local population if local recruitment goals are not met.	Access: Wider Community	Low	Medium	Low	Medium	Low	Minor	Possible	Medium	<ul style="list-style-type: none"> Monitor for achievement of local recruitment goals and, if goals are not realised, consider developing and implementing a Workforce Accommodation Management Plan to manage potential impacts from worker influx. 	Minor	Unlikely	Low
Operation Phase													
Employment and Procurement													
Direct and indirect jobs will be created due to the Project.	Livelihoods: Local Workforce	Medium	High	Medium	Medium	High	Major	Likely	High	<ul style="list-style-type: none"> Create awareness amongst the community, in partnership with LGAs and other partner organisations to foster a better understanding as to the ways prospective workers may be able to take part in the Project. This awareness can be generated through the use of a Project specific website and through existing communication channels within the LGAs. Develop and implement a Local Content Plan which includes local procurement goals for the Operation Phase. 	Positive	High	High
Demand for locally procured goods and services during the operation phase of the Project. There is strong interest in the local economic opportunities associated with Project procurement.	Livelihoods: Local Businesses	Medium	High	Medium	Medium	High	Major	Likely	High		Positive	High	High
Diversification of income streams for rural businesses (host landowners). Landowners will receive payments for hosting wind turbine infrastructure, diversifying the income streams that are available to them.	Livelihoods: Host Landowners	Low	High	High	High	High	Major	Almost Certain	Very High		<ul style="list-style-type: none"> Enact host landowner agreements as agreed. 	Major	Almost Certain
Land Use and Landscape													
Perceived potential impacts to neighbouring land values is common with opposition to wind farms and was mentioned during stakeholder engagement.	Livelihoods: Host Landowners and Project Neighbours	Low	Medium	Medium	Low	High	Moderate	Unlikely	Medium	<ul style="list-style-type: none"> Foster open communication with surrounding landowners in order to understand land devaluation concerns. Develop and implement a grievance mechanism, so that community concerns can be identified and actively managed. Consider extending community benefits to surrounding landowners (the community typically views these as an "offset"), for the perceived devaluation of land through Neighbour Agreements. 	Minor	Medium	Low
Altered rural character, including visual amenity impacts. Changes to rural landscape character through installation of industrial infrastructure.	Surroundings: Host Landowners, Project Neighbours, Wider Community, Visitors to the Region	Low	High	High	High	High	Transformational	Almost Certain	Very High	<ul style="list-style-type: none"> Project Developer to undertake localised visual impact assessment where merited (including properties that may have previously declined a visual impact assessment). Develop and implement a SEP, communicate the outcomes of the visual impact assessment. Develop and implement a grievance mechanism to ensure that concerns/ complaints are identified and acted upon. Develop and implement a Project Landscaping Plan informed by the Visual Impact Assessment, to guide installation of vegetated screening. Work with local businesses and groups to supply, plant, and maintain (for an initial establishment period) landscape screening. 	Major	Almost Certain	Very High

Project Activities and Potential Impacts	Impact Category and Stakeholders Affected	Impact Characteristics					Pre-Mitigation/ Enhancement Rating			Mitigation Measures / Enhancement Opportunities	Post-Mitigation / Enhancement (Residual Rating)		
		Extent	Duration	Severity	Intensity	Level of Concern/ Interest	Magnitude of Impact	Likelihood	Impact Significance		Residual Magnitude of Impact	Residual Likelihood	Residual Impact Significance
Aircraft safety associated with the WTG locations and tip heights. Potential impacts on aerial agriculture and water bombing for fire suppression activities.	Livelihoods: Host Landowners, Project Neighbours, Emergency Services	Low	High	Low	Low	Low	Minor	Possible	Medium	<ul style="list-style-type: none"> Conduct an updated Aerial Assessment for the amended turbine layout in order to confirm the impact on fixed-wing aircraft usage near WTGs. Develop and implement a SEP. Communicate the outcomes of the Airspace assessments and proposed technical mitigation measures (if required). Engage surrounding landowners, to discuss exclusion zones and address aerial spraying and water bombing concerns. Develop and implement a grievance mechanism to ensure that concerns/ complaints are identified and acted upon. 	Minor	Possible	Medium
Altered landscapes have the potential to impact tangible and intangible Aboriginal heritage.	Culture: Traditional Owners	Medium	High	Medium	Medium	Medium	Moderate	Possible	Medium	<ul style="list-style-type: none"> Develop and Implement a Cultural Heritage Management Plan which includes but is not limited to: <ul style="list-style-type: none"> Cultural awareness inductions for workers; Surface collection of artefact scatters Staged salvage excavation; Archaeological monitoring; Chance finds procedure; Repatriation of archaeological material post-construction; and Consultation with the local Aboriginal community. 	Minor	Unlikely	Low
Stakeholder and Community													
Development of the Oberon Community Enhancement Fund, a Project-specific community benefit sharing scheme, which may generate positive outcomes for the local community.	Community: Wider Community	High	High	Medium	High	High	Major	Almost Certain	Very High	<ul style="list-style-type: none"> Develop and implement the Oberon Community Enhancement Fund, consulting with key stakeholders and potential partners (e.g. Oberon LGA, community groups, etc.) Publish the Oberon Community Enhancement Fund to the wider community via community newsletters and other communications channels as per the SEP. 	Positive	Medium	Very High
Impacts to community cohesion through divided opinions about the desirability of the Project in the community. Community cohesion is potentially impacted at the level of relationships between individuals who support the Project and those who do not support the Project.	Community: Project Neighbours, Wider Community	Medium	Medium	Medium	Low	High	Moderate	Likely	High		Moderate	Possible	Medium
Real or perceived adverse potential health impacts associated with blade glint and shadow flicker, with electromagnetic interference, noise generation from WTG operation, or from potential damage to WTG structures (e.g. blade coming free).	Health and Wellbeing: Host Landowners and Project Neighbours	Low	High	Medium	High	High	Major	Likely	High	<ul style="list-style-type: none"> Develop and implement an Operational Environmental Management Plan. Develop and implement a SEP. Communicate the outcomes of relevant assessments such as the blade glint, shadow flicker, electromagnetic interference, and operational noise assessments and proposed technical mitigation measures (if required). Ensure agreements with host landowners that experience any impacts slightly above the limit recommended in the guidelines (i.e. shadow flicker, operational noise) are in place. Develop and implement a grievance mechanism to ensure that concerns/ complaints are identified and acted upon. If required, installation of screening structures / vegetative screening, or use of turbine control strategies should occur in order to mitigate adverse impacts. 	Moderate	Possible	Medium

Project Activities and Potential Impacts	Impact Category and Stakeholders Affected	Impact Characteristics					Pre-Mitigation/ Enhancement Rating			Mitigation Measures / Enhancement Opportunities	Post-Mitigation / Enhancement (Residual Rating)		
		Extent	Duration	Severity	Intensity	Level of Concern/ Interest	Magnitude of Impact	Likelihood	Impact Significance		Residual Magnitude of Impact	Residual Likelihood	Residual Impact Significance
Increased tourism to the local area.	Community: Local Communities	Medium	High	Low	Low	High	Moderate	Possible	Medium	<ul style="list-style-type: none"> Install the public viewing platform as requested by the Oberon LGA. 	Moderate	Possible	Medium
Cumulative Impacts													
Cumulative socio-economic impacts from an additional project in the region. Cumulative impacts affecting access to services are possible, particularly trades and accommodation arising from this Project combined with other proposed renewable development projects in the region.	Surroundings: Wider Community	High	Medium	Medium	Medium	Low	Moderate	Possible	Medium	<ul style="list-style-type: none"> Develop and implement a Local Employment Plan which includes incentives for the EPC to reach the desired local recruitment goals. Monitor for achievement of local recruitment goals and, if goals are not realised, consider developing and implementing a workforce accommodation management plan to manage potential impacts from worker influx. 	Moderate	Very Unlikely	Low
Cumulative visual amenity impacts from an additional project associated with the region. Cumulative impacts to surroundings are likely, particularly visual amenity across the wider area arising from this Project combined with other proposed renewable development projects in the region.	Surroundings: Wider Community	High	High	Medium	Medium	High	Moderate	Possible	Medium	<ul style="list-style-type: none"> Apply mitigations as appropriate as recommended by Moir Landscape Architecture (2022). 	Moderate	Possible	Medium

7. MONITORING AND MANAGEMENT FRAMEWORK

This section provides an overview of the recommended monitoring framework for the social impact management measures put in place during the construction and operation phases of the Project. For the post-mitigation impact significant levels to be achieved, as outlined in **Section 6**, the social impact mitigations will need to be monitored in accordance with the framework plan outlined in **Table 7.1** and integrated with the broader Environmental Management Strategy (EMS) to be developed for the Project.

The objectives of monitoring are to:

- Verify the predicted impacts and identify any other impacts that may arise;
- Verify that management measures are being implemented as planned;
- Assess the effectiveness of the management measures; and
- Provide data for any necessary regulatory reporting to the State Government or other internal compliance reporting.

Accordingly, **Table 7.1** identifies the following:

- **Management Goals:** The overarching objective is to minimise the negative social impacts associated with the Project and enhance the positive impacts. As such, specific goals corresponding to each impact have been provided. These can be used to determine whether the management measures have been effectively implemented.
- **Proposed Monitoring Activities:** The monitoring activities proposed will ensure that relevant data is collected (e.g. the performance indicators) during the various phases of the Project to ensure the effectiveness of the management measures.
- **Performance Indicators:** The indicators provide a mechanism to determine whether the goals have been met.
- **Monitoring Frequency:** Outlines the period for data collection.
- **Responsible Person:** Assigns the relevant person and/or entity to take charge of the proposed monitoring in order achieve the management goal.

Table 7.1 Proposed Monitoring Framework

Management Goals	Proposed Monitoring Activities	Performance Indicator(s)	Monitoring Frequency	Responsible Role
Construction Phase				
Stakeholder and Community				
Minimise community grievances	<ul style="list-style-type: none"> Record queries and complaints received from stakeholders 	<ul style="list-style-type: none"> Number of complaints Percentage of complaints satisfactorily resolved 	Ongoing	TBC
Employment and Procurement				
Maximise local employment	<ul style="list-style-type: none"> Record local employment Record employee retention rate Record number of apprenticeships Ensure major contractors report on local employment Record the number of training programs undertaken 	<ul style="list-style-type: none"> Percentage of people from the Region employed by the Project (including contractors) Number of training programs delivered Number of apprenticeships provided 	TBC in line with Project EMS	TBC
Maximise local procurement	<ul style="list-style-type: none"> Report on number of, and value of contracts with local and regional businesses 	<ul style="list-style-type: none"> Percentage of local and regional businesses involved in the Project Percentage of total value of relevant Project expenditure awarded to local and regional businesses 	TBC in line with Project EMS	TBC
Local Disruptions				
Minimise potential environmental and amenity impacts (i.e. noise, vibration, dust) on community members	<ul style="list-style-type: none"> Record queries and complaints received from stakeholders 	<ul style="list-style-type: none"> Number of complaints 	TBC in line with Project EMS	TBC
Accommodation and Worker Influx				
Maximise local employment and minimise potential impacts on accommodation availability, community and emergency services, and community wellbeing	<ul style="list-style-type: none"> Record local employment Record employee retention rate 	<ul style="list-style-type: none"> Percentage of people from the Region employed by the Project 	TBC in line with Project EMS	TBC
Operation Phase				
Employment and Procurement				
Maximise local employment and procurement	<ul style="list-style-type: none"> Record local employment Record employee retention rate Report on number of, and value of contracts with local and regional businesses 	<ul style="list-style-type: none"> Percentage of people from the Region employed by the Project Percentage of local and regional businesses involved in the Project Percentage of total value of relevant Project expenditure awarded to local and regional businesses 	TBC in line with Project EMS	TBC
Land Use and Landscape				
Minimise impacts to visual amenity and rural character	<ul style="list-style-type: none"> Record number of trees planted to fulfil required screening planting mitigations 	<ul style="list-style-type: none"> Percentage survival rate of trees planted 	TBC in line with Project EMS	TBC
Stakeholder and Community				
Distribute benefits from the Project among the wider community	<ul style="list-style-type: none"> Record and publish detailed information on funds available and payments made through the Oberon Community Enhancement Fund 	<ul style="list-style-type: none"> Number and value of grants and payments made 	TBC in line with Project EMS	TBC

7.1 Reporting and Auditing

In addition to ongoing monitoring, regular audits are to be undertaken by the Project. These audits are to be conducted throughout the construction and operation phases of the Project, will likely be informed by the outcomes of the EIS process and DPE's conditions of approval and will be updated accordingly.

Audit findings will be reviewed, and where corrective actions are deemed necessary, specific actions (with designated responsibility and timing) will be developed. The focus of these actions will be on achieving the objectives set out in **Table 7.1**, as well as continuous improvement in performance.

A summary of the audit findings is to be reported externally on an annual basis. This will include an evaluation of the objectives set out in **Table 7.1** and any corrective actions that have been developed because of the audit process.

It is recommended that the predicted impacts and corresponding management measures (i.e. Project performance) be internally audited annually and externally audited once every three years. This timeframe may be extended or reduced based on the findings of ongoing audits.

7.2 Roles & Responsibilities

The Project will be principally responsible for implementation of the management measures and the monitoring activities carried out for the Project. However, there will be instances where data will need to be obtained from a third party, or implementation will require cooperation and involvement of others (e.g. contractors and relevant local stakeholders).

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