



Burroway Solar Farm Scoping Report

Burroway, NSW

Request for Secretary's Environmental Assessment Requirements (SEARs)

February 2023



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Abbreviations

ACHA	Aboriginal Cultural Heritage Assessment
AEMO	Australian Energy Market Operator
AHD	Australian Height Datum
AHIMS	Aboriginal Heritage Information Management System
ALC	Aboriginal Land Council
ARTC	Australian Rail Track Corporation
BC Act	<i>NSW Biodiversity Conservation Act 2016</i>
BDAR	Biodiversity Development Assessment Report
BSAL	Biophysical Strategic Agricultural Land
CLM Act	<i>NSW Crown Land Management Act 2016</i>
CMA	Catchment Management Authority
DA	Development Application
DIRN	Defined Interstate Rail Network
DoEE	Department of the Environment and Energy
DPE	NSW Department of Planning and Environment
DRC	NSW Department of Resource & Geoscience
DRE	NSW Department of Industry – Division of Resources and Energy
EMMP	Environmental Management and Monitoring Plan
EIS	Environmental Impact Statement
EMS	Environmental Management System
EP&A Act	<i>NSW Environmental Planning and Assessment Act 1979</i>
EPA	NSW Environment Protection Authority
EPBC Act	<i>Commonwealth Environment Protection and Biodiversity Conservation Act 1999</i>
ETL	Electricity Transmission Line
GW	Gigawatt
ICNG	Interim Construction Noise Guideline
LEP	Local Environmental Plan
LGA	Local Government Area
LLS	Local Land Services
LVIA	Landscape and Visual Impact Assessment
MDBA	Murray-Darling Basin Authority
MNES	Matters of National Environmental Significance
MW	Megawatt
MVA	Megavolts
MWh	Megawatt Hour
NSW	New South Wales
O&M	Operations and Management
OEH	NSW Office of Environment and Heritage
PAC	Planning Assessment Commission
PCT	Preliminary plant community type
POEO Act	<i>NSW Protection of the Environment Operations Act 1997</i>
PV	Photovoltaic
REAP	Renewable Energy Action Plan
RF Act	<i>NSW Rural Fires Act 1997</i>
RFS	Rural Fire Service
RMS	NSW Roads and Maritime Service
SEARs	Secretary's Environmental Assessment Requirements
SEPP	State Environmental Planning Policy
SIA Worksheet	Social Impact Assessment Worksheet
SPIC	State Power Investment Corporation
SSD	State Significant Development
TIA	Traffic Impact Assessment
TSR	Travelling Stock Reserve
WM Act	<i>NSW Water Management Act 2000</i>

1 Introduction

1.1 Project Overview

Edify Energy Pty Ltd (ABN 85 606 684 995; Level 1 34-35 South Steyne Manly 2095) proposes to develop a solar project in the township of Burroway, New South Wales, to be known as the Burroway Solar Farm (referred to as the Project). The objective of the Project is to generate new and dispatchable carbon-free electricity supply for NSW. Subject to necessary approvals, Edify Energy (Edify) anticipates construction to commence in 2025.

The Study Area equates to approximately 495 hectares (ha) of rural land currently used for agricultural purposes (cropping). The indicative Development Area (Impact Area) will occupy a portion of this area, with further refinement and micro-siting to occur as a result of future technical studies. The Project is expected to have a generation capacity up to 100 Megawatt (MW) alternating current (AC) and up to 100MW / 400MWh of energy storage. The site is located approximately 17.5 kilometres (km) north of Narromine and 27 km west of Dubbo, located within the Central West and Orana region. Figure 1 illustrates the Subject Land (Study Area) in relation to Narromine, Dubbo and the Central West and Orana Renewable Energy Zone (REZ) of New South Wales (NSW).

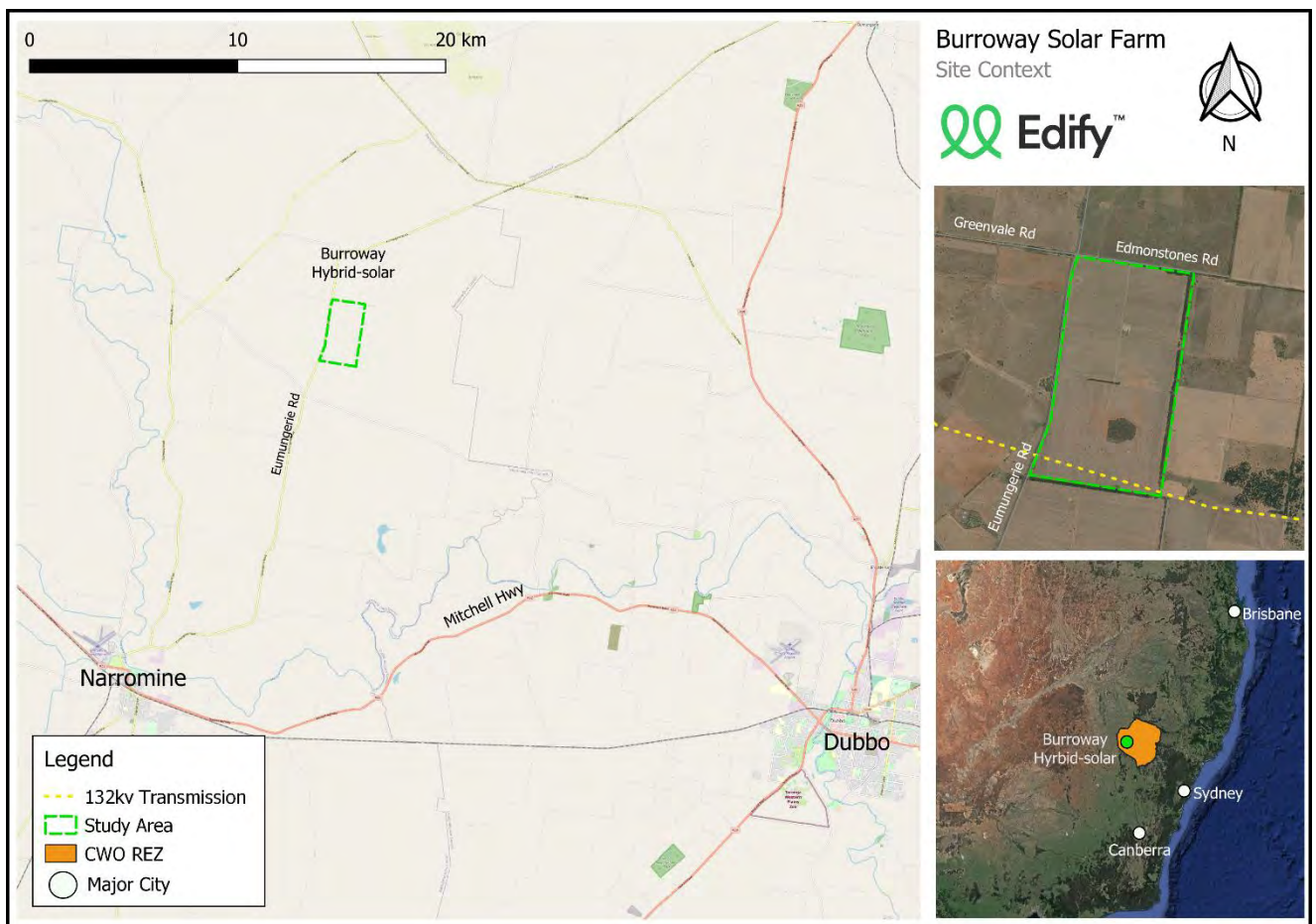


Figure 1 - Study Area in a regional setting

The Study Area involves one (1) lot, which has been secured under contract by Edify. The surveyed lot is Lot 70 in Deposit Plan 1251856, which is known as 'Kookaburra' 1955 Eumungerie Road, Burroway. The

proposed lot is also host to an existing 132 kilovolt (kV) distribution line which crosses east-west through the southern section of the Impact Area (Figure 2).

The overhead 132kV distribution line runs from Dubbo to Nevertire, with the distribution line owned and operated by Essential Energy.

The Project intends to connect into the existing distribution line (Line #94W/1). This will require a new T-connection into the existing distribution line, and the construction of a new step-down substation from 132kV to 33kV. This distribution line presents a suitable connection point for the Project due to its current network capacity, which requires no additional easements when establishing a new point-of-connection for the solar and battery assets.



Figure 2 - Essential Energy's 132kV line (#94W/1) within Study Area

The Project includes infrastructure such as solar panels, inverters, transformers, underground cabling, an integrated battery storage system (up to 100MW / 400MWh), site office and maintenance building, access tracks, road and electrical easement crossings, perimeter security fencing, and a substation to connect the Solar Farm to Essential Energy's existing 132kV transmission line.

The Project represents Edify's continued investment in renewable energy projects throughout regional NSW. Similar to Edify's prior success in the State, the development will be consistent with the *NSW Large-Scale Solar Energy Guideline for State Significant Development* (NSW Government, 2022) and is expected to deliver several benefits including:

- the creation of local employment opportunities, including approximately 250 full-time equivalent jobs during the peak construction period
- approximately five permanent jobs during the operation of the Project (>30 years)
- direct local investment via a Community Benefit Fund
- increased electricity generation capacity and grid support, via the solar asset

- increased dispatchable electricity, firming and system strength services, via the battery energy storage system; and
- a Voluntary Planning Contribution to be negotiated with the Narromine Shire Council

The Project will have a capital investment of greater than \$30 million and therefore is considered a State Significant Development (SSD) under the *State Environmental Planning Policy (State and Regional Development) 2021* (SRD SEPP). Edify will prepare a Development Application (DA) for the Project that is supported by an Environmental Impact Statement (EIS). This will be submitted in accordance with Part 4, Division 4.1 of the *NSW Environmental Planning and Assessment Act 1979* (EP&A Act). The NSW Minister for Planning or the Minister's delegate is the consent authority.

1.2 Purpose

The Federal Department of Climate Change, Energy, the Environment and Water and the NSW Government NSW State Significant Infrastructure Guidelines (Appendices A and B), detail the requirement for developments to follow an offset mitigation hierarchy. The hierarchy is characterised by the following three step process, in order of preference:

1. Avoid
2. Minimise and/or mitigate
3. Offset

This scoping report illustrates findings of preliminary social, economic and environmental investigations such as the Preliminary Ecological Assessment (Appendix J). Potential impacts identified from this scoping report and supporting technical studies allows Edify to begin to address the first step in this hierarchy by avoiding potential impact areas/matters. Detailed studies undertaken as part of the EIS will further refine Edify's understanding of the Study Area and continue to inform our application of the hierarchy.

The Scoping Report has been prepared to support a request to the Department of Planning and Environment (DPE) for the SEARs. The SEARs would guide the preparation of an Environmental Impact Statement (EIS) for the Project under Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act). It identifies the main issues and information requirements for the assessment, considering the values of the site, the nature and extent of potential impacts, planning and regulatory requirements and the results of early consultation. This allows the assessment to efficiently focus on the most important issues.

In achieving this propose, this Scoping Report intends to:

- Justify the development in relation to policy and market frameworks (Section 2)
- Describe the Project and the site (Section 3 and 4)
- Identify statutory approval requirements (Section 5)
- Provide a summary of consultation undertaken to date and proposed further engagement (Section 6)
- Identify key potential environmental issues associated with the Project (Section 7)
- Conclude with remarks and identification of key issues raised in preparation of the Scoping Report

1.3 Applicant – Edify Energy Pty Ltd

Edify Energy is a market leading, Australian-owned renewable energy company with significant experience in developing and project financing renewable projects across Australia. Edify has financed six large-scale solar generation projects (773MWp), an 84MVA synchronous condenser and two utility-scale battery energy storage systems (175MW / 350MWh) and is the leading developer of utility-scale renewable energy projects

in Australia. Edify has broad energy expertise, covering project development, project design and engineering, financing, asset management and construction management.

Edify's management team has in excess of 150 years' experience in the power and renewables sector internationally, raised and deployed around \$3 billion in capital bringing over 40 solar and wind projects into commercial operation, advised on over 10GW (around \$25 billion of projects during development, construction and operation and managed an operational portfolio of more than 1.7GW).

Edify supports the full life-cycle of renewable energy projects during development, construction and operation, including greenfield development, project structuring and financing, construction management and a full asset management offering, including trading and operations.

Edify's philosophy is to ensure that its interests are closely aligned with its investment partners and community stakeholders. In addition to providing long-term asset management services, Edify seeks to maintain a long-term equity interest in its projects, ensuring that Edify's long-term project view is aligned with that of its investors and host community, resulting in best-in-class assets. This long-term business model is a distinguishing feature of Edify and should further instil confidence that the community is entering into a credible, long-term partnership. This also makes an important difference in our community engagement approach, due to the fact that we are establishing relationships with various local stakeholders during the development phase. These relationships will endure for the lifetime of the Projects, with Edify acting as Asset Manager once the Project is operational.

2 Strategic Context

2.1 Strategic Justification

2.1.1 Technical Feasibility

The Study Area comprises flat and predominantly clear terrain, making it a suitable location for a utility-scale solar project.

The Project will utilise proven and mature solar and battery technologies. The Study Area is well suited to efficient and high-yielding output of solar generation. Battery storage would also aid in storing and managing energy flows to the grid during times of grid constraints (charging) and peak electricity demand (discharging). This dispatchable capability allows the Project to de-couple its output from typical, weather dependent generation profiles, for example by allowing the Project to service periods of high demand during the evening (post sunlight) hours.

Furthermore, the NSW electricity market is undergoing significant change, with a number of major energy generators scheduled to reach the end of their lifespan and are likely to be retired. The first of which large generators to be retired is located at the Liddell coal-fired power station which was shut down in April, 2022, with the final three turbines to be shut down by April 2023. This closure will likely be followed by Vales Point, Eraring and other major generating units later this decade. There is a risk that without new investment in sufficient generation capacity, these retirements have the potential to lead to interruptions in energy security.

The proposed investment's connection would be achieved by 'cutting' into the 132 kV line (Essential Energy owned) crossing the site, with the majority of generation likely exported east towards Dubbo. A substation would be constructed in the Impact Area. It is noteworthy that the electricity grid in New South Wales can present challenges in terms of having the capacity to connect utility scale renewable energy projects. The Project benefits from having good connection options within the site with sufficient capacity and system strength in the transmission network to allow power generated at Project to be exported to the regional NSW power system. The site also has relative proximity to Dubbo, a major regional load centre.

2.1.2 Contributions to Federal and State Climate Change Targets

Electricity generation is the largest individual contributor of greenhouse gas emissions in Australia, accounting for 47.6 per cent of emissions in the 2020-21 reporting year (Australian Government Clean Energy Regulator, 2023). This proposal contributes to the decarbonisation of this emissions intensive sector, with bulk supply of firmed and dispatchable renewable energy sources, all of which are required to replace traditional, thermal electricity generators that are approaching their intended design-life.

2.1.2.1 Renewable Energy Target

The Clean Energy Regulator (CER) introduced the Renewable Energy Target in 2001, which is an Australian Government scheme designed to reduce emissions of greenhouse gases in the electricity sector and encourage the additional generation of electricity from sustainable and renewable sources.

In the context of this proposal, the Renewable Energy Target works by allowing large-scale generators to create large-scale generation certificates for every megawatt hour (MWh) of energy they generate. Certificates are then purchased by electricity retailers (who supply electricity to householders and businesses) and submitted to the Clean Energy Regulator to meet the retailers' legal obligations under the Renewable Energy Target.

The COP21, also known as the 2015 Paris Climate Conference, achieved a legally binding and universal agreement on climate, with the aim of keeping global warming below 2°C, chiefly by reducing greenhouse gas emissions (Australian Government, Department of Industry, Science, Energy and Resources, 2020). The Project would form part of the Australian effort to help meet this binding, international target.

2.1.2.2 NSW Net Zero Plan Stage 1: 2020-2030

The NSW Department of Planning and Environment (NSW DPE) *Net Zero Plan Stage 1: 2020– 2030* is a commitment to taking decisive and responsible action on climate change. The *Plan* has the goal of reducing the State’s emissions by 35% by 2030, compared to 2005 levels, whilst supporting regional investments that total \$7 billion and create approximately 1700 regional employment opportunities (NSW Government 2020).

The NSW Government has also set a broader goal of net zero emissions by 2050 and has released these policies to fast-track emissions reduction over the next decade and prepare the State to take further action in the decades to follow.

The Burroway Solar Farm proposal would contribute towards both the Renewable Energy Target and the *New South Wales Electricity Strategy* and *Net Zero Plan*, with the latter representing a State-based initiative designed to support the national target of achieving 33,000 gigawatt hours of renewable electricity generation (approximately 26-28%) renewable energy by 2030 (Clean Energy Regulator, 2018).

The Burroway Solar Farm proposal is also located within the Central West and Orana Renewable Energy Zone (Figure 3).

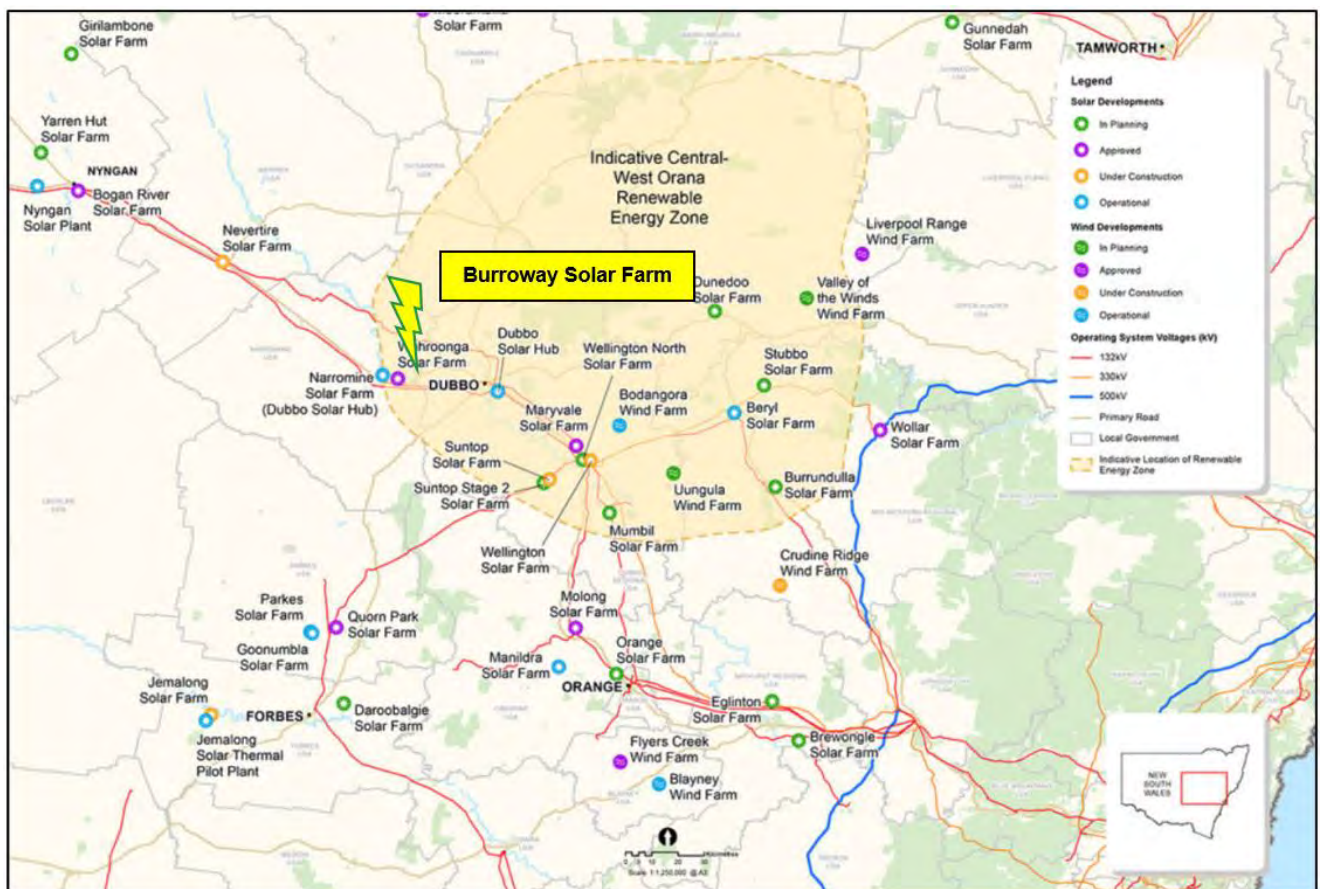


Figure 3 - Central West and Orana Renewable Energy Zone (NSW Energy Co, 2022) - Burroway Solar Farm

Due to the proximity of the Project to one of the priority Renewable Energy Zones in New South Wales, the Project will support the four goals of the NSW Electricity Strategy, which includes:

- delivering various Renewable Energy Zones;
- saving energy, especially for times of peak demand;
- supporting the development of new electricity generators; and
- setting a target to bolster the state's energy resilience.

2.1.3 Electricity Market Benefits

Australian Energy Market Operator (AEMO 2020) forecasts that grid-supplied electricity consumption will remain flat for the next 20 years, despite projected 30% growth in population. Although not required to meet projected electricity demand, the Project would benefit the network by shifting electricity production closer to local consumption and regulating inputs to the grid using a Battery Energy Storage System.

The electricity network was designed to deal with a small number of very large power generating stations. The increasing localisation of power generation helps the grid to cope with the supply from diversified renewable energy projects, such as intended via this proposal.

2.1.3.1 Electricity prices

According to Deloitte, Australian households will pay \$510 million more for power in 2020 without renewable growth through the RET and up to \$1.4 billion more per year beyond 2020.

Renewables increase competition in the wholesale energy market – and, as in any market, more competition means lower prices. This is particularly true in the case of the dispatchable capability provided by the battery energy storage system, which will increase competition and capacity to satisfy peak demands and place downward pressure on electricity prices.

2.1.4 Socio-economic Benefits

2.1.4.1 Employment

In 2018/19, 26,850 Australians were directly employed in the renewable energy sector with an additional 5,770 jobs created since the 2017/18 financial year (ABS 2020).

This proposal would generate a significant number of new jobs (up to approximately 250 full-time employees) during the peak construction phase in regional NSW, in addition to indirect employment opportunities supported from the ancillary supply chain.

The Project will create a range of permanent employment opportunities (approximately five employees) and indirect full time equivalent staff during the operation and maintenance phase (expected to be approximately 30 years).

The employment benefits for construction extend through the local supply chains to fuel supply, vehicle servicing, uniform suppliers, hotels/motels, cafés, pubs, catering and cleaning companies, tradespersons, tool and equipment suppliers and many other businesses.

Further extension of employment benefit extends through the operation of the Project, such as panel cleaning and maintenance, electrical maintenance, fence supplies and maintenance, road grading, plus the grazing and shearing of sheep.

2.1.4.2 Economic diversification

The Project would diversify the use of land in the area, with the predominant land use in the area being agricultural usage and industrial (mining) operations. The Project would add to that and provide both local land

holders and businesses in the broader area with an additional source of income and economic activity. The income created in the locality from the Project would be consistent and stable. This income will be of greater security being removed from the normal cycle and risks of agricultural activity (like flood and drought).

2.1.5 Land Use

It is also important to note that Solar Farms do not preclude the use of land for agriculture. Some agricultural activity is still possible whilst a Solar Farm is operating (e.g. grazing). The deliberate combination of solar and agricultural activities through design are referred to as Agri-Solar. Additionally, the degree of permanent land disturbance in the construction and operation of Solar Farms is small, and it is expected that agricultural activities that were occurring before the Solar Farm was constructed would be able to be continued once the Project is decommissioned and removed.

2.1.6 Site Suitability

Key considerations for site selection are detailed within the NSW Large-scale Solar Energy Guideline for State Significant Development (DPE 2022). The key site constraints with justification as to why the site is suitable is detailed in Table 2 below:

Table 1 - Key Site Constraints with Justification

Areas of constraint	Site justification
<p>Visibility and topography - Sites with high visibility, such as those on prominent or high ground positions, or sites which are located in a valley with residences with elevated views looking towards the site. This is particularly important in the context of significant scenic, historic or cultural landscapes.</p>	<p>The Study Area has been selected due to the relative isolation from residential clusters and townships. Notwithstanding, the nearest non-involved residential receiver is located approximately 1,795m west of the Impact Area. This is considered an appropriate setback distance that is unlikely to create impacts to this receiver, however measures will be considered to further reduce any potential visual impact, such as planting vegetation screening and other mitigation features.</p> <p>Edify have completed a Preliminary Visual Impact Assessment (Section 7.2.4) to identify viewpoints requiring further detailed assessment.</p> <p>Edify will prepare a detailed Visual Impact Assessment, Viewshed Analysis and Landscape Management Plan as a part of the EIS to illustrate the potential viewpoints of the Project from the proximate neighbours and other potential viewpoints for local motorists.</p>
<p>Biodiversity - Areas of native vegetation or habitat of threatened species or ecological communities within and adjacent to the site, including native forests, rainforests, woodlands, wetlands, heathlands, shrublands, grasslands and geological features.</p>	<p>The Subject Land has largely been used for current and historic cropping activities, with only small patches of natural and planted woodland occurring within the lot and surrounding the lot. The preliminary ecological assessment identified 4 PCT's on the subject land and surrounds, with one PCT potentially meeting the criteria of a CEEC. There are no watercourse or drainage features traversing the subject land. Natural and man-made habitat features are present on site.</p>

Areas of constraint	Site justification
	<p>The development footprint is currently designed to avoid clearing of any vegetation and disturbance to man-made structures acting as potential habitat.</p> <p>Two access locations will be investigated further during the Biodiversity Development Assessment Report (BDAR) to determine the location that will either avoid environmental impacts or have a minimised environmental impact.</p> <p>Edify will establish non-development zones to retain sections of mature and valuable biodiversity areas within the Impact Area with suitable buffers to ensure all native vegetation is avoided. Edify will prepare a Biodiversity Development Assessment Report as part of the EIS process to inform micro-siting of infrastructure.</p>
<p>Residences - Residential zones or urbanised areas.</p>	<p>The Project is not likely to generate land use conflicts with surrounding land uses and is compatible with land use zoning. The proposed Impact Area is within land zoned RU1, Primary Production under the Narromine Shire Council's Local Environmental Plan (LEP).</p> <p>Edify has prepared a register of all neighbours within 5km of the Project boundary, noting the closest residence is setback approximately 1,795m from the Impact Area. Many of these landholders have already been consulted via phone and/or email, and information packs have been provided (Appendix C).</p>
<p>Agriculture - Important agricultural lands, including Biophysical Strategic Agricultural Land (BSAL), irrigated cropping land, and land and soil capability classes 1, 2 and 3. Consideration should also be given to any significant fragmentation or displacement of existing agricultural industries and any cumulative impacts of multiple developments.</p>	<p>The Project is not mapped to be located on important agricultural land, including industry clusters and biophysical strategic agricultural land. The Project is mapped on land classed as Soil Capability Class 3 land. However, the Project:</p> <ul style="list-style-type: none"> • Is not expected to adversely affect the biophysical nature of the land. • Would positively affect soils by providing many of the benefits of long-term fallow, including increasing soil moisture, building soil carbon levels, allowing structural recovery and improving soil biota. • Will not result in the permanent removal of agricultural land. • Would not result in rural fragmentation given it will not alter the existing or surrounding environment. • Adjacent farming operations are compatible. • Strategic sheep grazing may be used within the Impact Area. Grazing would be used to reduce

Areas of constraint	Site justification
	<p>vegetation biomass and put grazing pressure on weeds adjacent to the solar panels.</p> <p>Edify has engaged a soil scientist consultant to undertake soil sampling and laboratory testing to verify the Soil Capability. Results will be presented, along with an Agricultural Impact Statement during the upcoming EIS phase of the Project.</p>
<p>Natural Hazards – Areas subject to natural hazards, such as flooding and land instability.</p>	<p>The site has not been identified as flood prone in the Narromine Shire Council’s LEP.</p> <p>The site has been identified as bushfire prone (refer to Appendix H). Edify will engage with Country Fire Authority and NSW Fire & Rescue when preparing the Preliminary Hazards Assessment to ensure the Project’s design and water supply infrastructure is located and installed in accordance with fire authority requirements.</p>
<p>Resources - Prospective resources developments, including areas covered by exploration licences and mining and petroleum production leases, Solar development applicants should seek advice from the Department of Planning, Division of Resources and Geoscience (GSNSW) about the coverage of resources related licences.</p>	<p>The Impact Area is covered by an exploration lease (#EL8961).</p> <p>Edify has made initial contact with Sunrise Energy to inform them of Edify’s interest in the land (Appendix C). Edify will maintain contact and meet reasonable requests/requirements throughout the planning process.</p>
<p>Crown Lands – If any part of the Project or associated transmission or distribution infrastructure will cross Crown Lands, it may be subject to legislative requirements that restrict access to the land.</p>	<p>No Crown Lands or Crown Roads are present within the proposed Impact area (See Appendix I).</p> <p>Edify will engage with Crown Lands following the Secretary Environmental Assessment Requirements to ensure suitable measures are implemented by the Project, as required.</p>

3 Project

3.1 Location

The Project is located within the NSW Central West and Orana region in the Narromine Shire Local Government Area (LGA), around 17.5 km north of Narromine and 27 km west of Dubbo. The Study Area is accessible via Eumungerie Road, via Dubbo-Burroway Road. The Project aims to connect to an existing Essential Energy 132 kV line crossing the site, via a new 132 kV substation.

The Study Area is located within the Narromine Shire Council Local Government Area and is within the Pilliga IBRA Subregion (Brigalow Belt South IBRA region).

3.2 The Impact Area

The Study Area equates to approximately 495 ha, encompassing Lot 70 in Deposit Plan 1251856. The final Impact Area will be decided during the EIS phase of the Project, and based partly on the conclusions of this report and the subsequent feedback from the SEARs.

Figure 4 demonstrates the high-level design of the Project, with the preferred access options off Eumungerie Road on the Western boundary of the Lot. During the Biodiversity Development Assessment Report (BDAR), Traffic Impact Assessment (TIA), and other technical studies undertaken as part of the EIS, potential access locations along the Western boundary will be investigated to identify the optimal siting with minimal impact.

The proposed Impact Area is agricultural land comprising a large agricultural property, which includes paddocks that are generally flat and largely cleared, primarily for agricultural (cropping) purposes (Figure 5 through Figure 8).

At the time of survey, Category 1– Exempt Land could not be determined as present, in accordance with the definitions provided in the LLS Act.

Based on the ecological survey findings, Edify has elected to refine the intended Impact Area to avoid developing the surveyed areas that contain PCT 202 (Regrowth Fuzzy Box Woodland) and PCT 55 (Belah dominant woodland in various condition states) within the Subject Land.

The identification of the majority of the native vegetation in areas surrounding the Subject Land lot or in a small number of distinct polygons within the lot will make it highly likely that all native vegetation, including individual paddock trees, will be avoided through micro-siting of the Project design. The full extent of final impacts, if any, will be assessed further as Edify prepares the Biodiversity Development Assessment Report (BDAR) and Environmental Impact Statement (EIS).

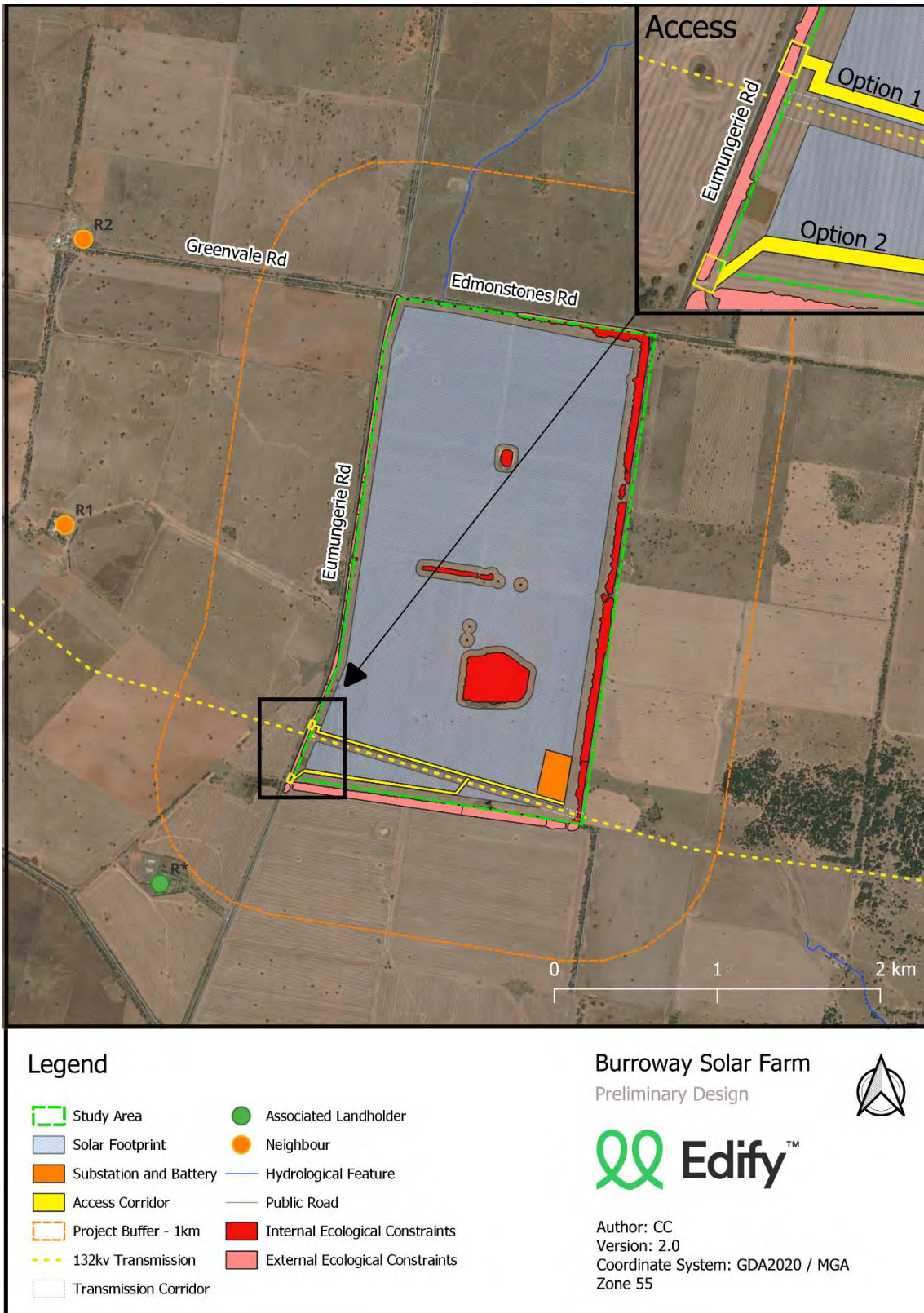


Figure 4 - Preliminary Site Layout Plan (Impact Area)



Figure 5 - View of typical impact area with electricity transmission line in view from Study Area



Figure 6 - View of farm dam within northern aspect of the Study Area



Figure 7 - View of typical Impact Area



Figure 8 - View of typical Impact Area

Within the Study Area, there are four (4) farm dams, with no creeks or tributaries. The largest of these dams will be avoided. The Impact Area is zoned RU1 - Primary Production under the *Narromine Shire Council's Local Environmental Plan (LEP)*¹, with a minimum lot size of 400 ha.

The Impact Area is identified as Class 3 Soil Capability Land under the Land and Soil Capability Assessment Scheme (Figure 9), which is defined as:

- Class 3 Land has limitations that must be managed to prevent soil and land degradation. However, the limitations can be overcome by a range of widely available and readily implemented land management practices. Also included are lands that can be subject to wind erosion when cultivated and left bare. It includes a large proportion of the major agricultural producing areas of the State.

This suggests that agricultural land use can be readily used for a range of crops including cereals, oilseeds and pulses, however productivity will vary with soil fertility (OEH 2012).

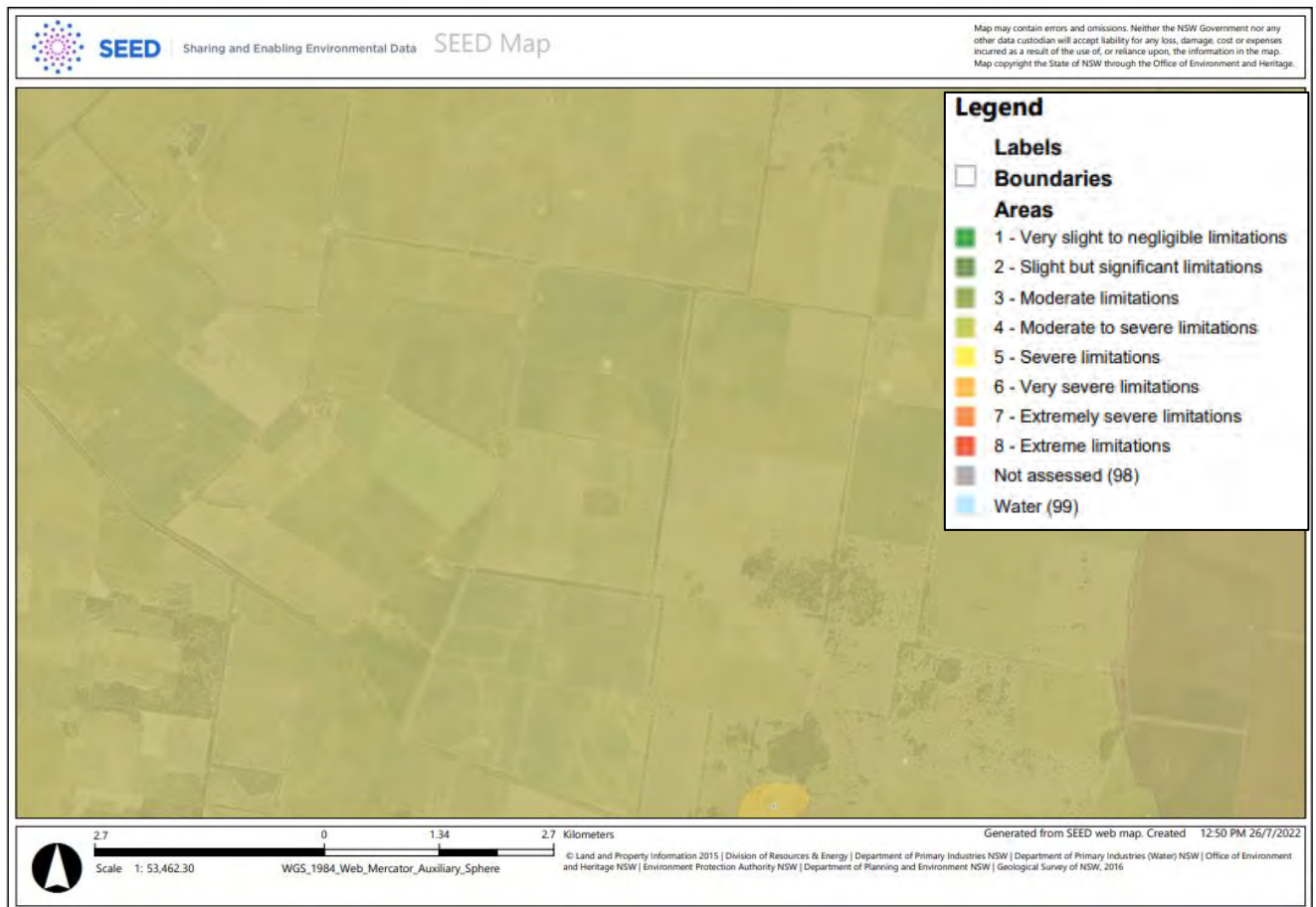


Figure 9 - Land and Soil Capability Mapping

The NSW Government introduced a range of measures designed to deliver greater protection to agricultural land from the impacts of developments. These measures included the safeguarding of 2.8 million hectares of Biophysical Strategic Agricultural Land (BSAL) across the state, and Critical Industry Clusters (CIC). BSAL is land identified with high quality soil and water resources capable of sustaining high levels of productivity, which is critical to sustaining the state's agricultural industry, while CIC are concentrations of highly productive industries within a region that are related to each other, contribute to the identity of that region, and provide

¹<https://www.planningportal.nsw.gov.au/publications/environmental-planning-instruments/narromine-local-environmental-plan-2011>

significant employment opportunities. The Impact Area is not mapped as being BSAL, therefore the Project would not impact on land critical for agriculture (DPE 2017).

The land is owned by one family group. The family resides proximate to the Study Area and continues to utilise the site for agricultural purposes. Regarding the adjacent community members, 16 non-associated dwellings, and no industry stakeholders are located within 5.0 km of the Impact Area (Table 2 and Figure 10).

Table 2 - Project Neighbouring Receivers

Receiver	Distance from Survey Area (m)	Receiver	Distance from Survey Area (m)
R1	1795	R2	1962
R3	2002	R4	2134
R5	2322	R6	2426
R7	2602	R8	3137
R9	3685	R10	3868
R11	4286	R12	4575
R13	4813	R14	4828
R15	4939	R16	5030
R*²	3487		

² R* is the Associated Landholder



Figure 10 – Impact Area in relation to nearby receivers (5km)

3.3 The Locality

The Project is located within the Narromine Shire Council LGA, in the Central West and Orana region of New South Wales, approximately 27km west of the major regional centre of Dubbo. The region has several small towns including Narromine, Trangie and Tomingley. The LGA is 5,264 km² with a population of 6,360 as at the 2021 Census (ABS 2021).

3.3.1 Dubbo

The major town of Dubbo is located approximately 27 km east of the proposed project, with a population of 38,943 as at the 2016 Census (ABS 2016). Mudgee's major employment sectors include hospitality, education, food services and government administration. The distinct competitive advantages of Narromine, Dubbo and the surrounding regional Council includes the skilled workforce, adequate water supply and the central location between Sydney and Newcastle.

Figure 11 illustrates the Project site in red in relation to Narromine and the Narromine Shire Council's Flood Planning Area (LEP, 2011).



Figure 11 – Narromine Shire Council’s Local Environmental Plan (LEP) with Flood Planning Area

3.3.2 Population

The median age of persons in Narromine Shire LGA is 41, which is higher than the Australian average of 38 (ABS 2021). The 2021 census records state that 18.7% of the population are Aboriginal and Torres Strait Islander people (ABS 2021). A large portion, 84.5% of the community were born in Australia. In addition, the community hosts a low unemployment rate, with median household incomes averaging \$1,341 per week.

3.3.3 Climate

The BOM (2021) climate records available from the nearest climate station at Dubbo (Station number 065012) consists of data recorded since 1870. The station indicates a mean summer maximum of 33°C (January) and a mean winter minimum of 2.6°C (July).

Rainfall records from the station show a mean annual rainfall of 587.6 mm, and that rainfall is generally greatest over summer and spring, with the mean number of days of rain being 76 (Figure 12).

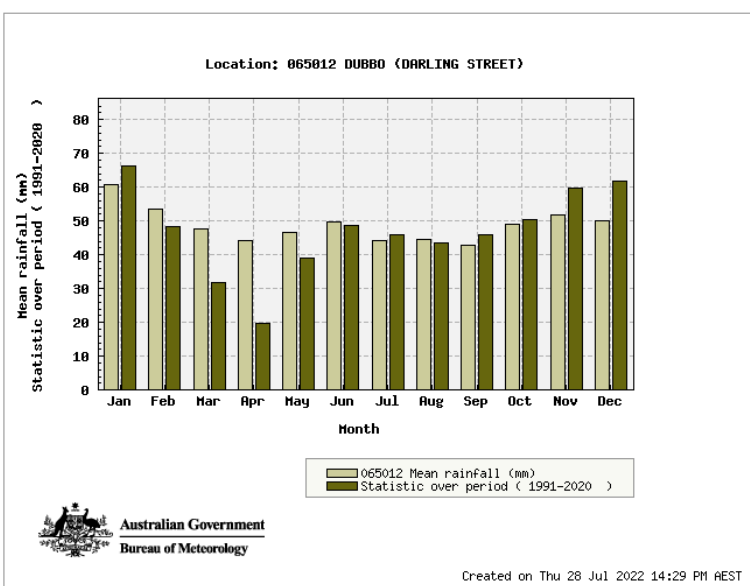


Figure 12 - 30 year rainfall statistics for Dubbo, NSW

3.3.4 Geology and Vegetation

The geological characteristics for the Pilliga subregion of the Brigalow Belt South Bioregion comprises stepped sandstone ridges with low cliff faces and high proportion of rock outcrop.

In addition, the typical vegetation can include White Box with White Cypress-pine and Kurrajong on the basalt hills; Blue-leaved Ironbark, White Gum, Black Cypress-pine, Whitewood, and Rough-barked Apple on stony sandstone plateau and streams; Narrow-leaved Ironbark, White Cypress-pine, Red Stringybark, patches of mallee and broom heath on gentler sandstone slopes and/or Pilliga Box with Grey Box, Poplar Box, Fuzzy Box, Bulloak, Rosewood, Wilga, and Budda on heavier soils in the west and north.

The subject land lacks significant geological features. No rock outcrops, areas of embedded rock, or substantial areas of loose surface rock were noted during the preliminary ecological assessment. The native vegetation cover within the study area included remnant woodland and both natural and derived grasslands.

4 Proposed Works

4.1 Site Selection

The site of the Project has been selected for the following reasons:

- Excellent solar exposure.
- Excellent access to local and major roads, plus regional city resources.
- Excellent access to the overhead grid transmission networks.
- Likely low level of environmental impact – the site has been largely cleared and heavily disturbed by agricultural grazing activities.
- Suitable topography, land size and land zoning, whereby the use of the site would be based on a lease agreement between Edify and the landowner for the life of the Project.

4.2 Project Components

4.2.1 Proposed Infrastructure

The Project involves the construction of a ground mounted photovoltaic solar array which would have capacity to generate up to 100MW (AC) of renewable energy. The Solar Farm proposes to connect into an existing 132 kV Essential Energy distribution line (line 94W/1) that traverses the Project. The Project would consist of the following components:

- Single axis tracker photovoltaic solar panels mounted on steel frames over most of the site (maximum tilt up to 4.5m in height).
- Battery energy storage systems with a rating of up to 100MW / 400MWh.
- Underground and overground electrical conduits and cabling to connect the arrays to the inverters and transformers.
- Systems of inverter units and voltage step-up throughout the arrays.
- On site substation, connecting to the existing 132 kV Essential Energy transmission line.
- Site office and maintenance building, vehicle parking areas, internal access tracks and perimeter security fencing.
- Site access track off Eumungerie Road.

The Solar Farm arrangement is flexible and adaptable and would be designed to avoid impacts where feasible and minimise and mitigate environmental impacts if avoidance is not possible. The design would consider the results of the Scoping Report, consultation with relevant stakeholders and the EIS to be prepared. The EIS would detail how these studies have been used to produce the final proposal design.

The proposed infrastructure footprint is shown in Figure 4. This includes all land likely to be directly impacted by the construction, operation and decommissioning of the Project, including auxiliary construction facilities (site compound, laydown, stockpiling, etc.) and all considered options. It is noteworthy that the proposed footprint is indicative only and will be refined as part of the EIS process (considering environmental constraints and engineering studies), with project infrastructure layout to be detailed in the EIS.

4.2.1.1 Solar Array Areas

The development will consist of a number of solar array areas or blocks comprised of photovoltaic modules arranged in a series of long rows. The modules are mounted on frames with tracking systems which follow the sun to optimize energy generation. The frames are fixed to piles driven into the soil. The rows interconnect

to form a single array block of up to 4 MW (AC) or 8 MW (AC), depending on the MV enclosure design. In each block there will be a prefabricated, containerized inverter and integrated transformer to convert and step up the voltage level. Electrical connections will also be constructed between the PV arrays, as well as associated monitoring and protection equipment and central inverters via underground or frame secured cabling.

The solar module frames and inverter stations will be installed on piles and sit above ground level, with a maximum height of approximately 4.5m at full tilt. This ensures retention of existing grassland vegetation and habitats in situ with a minimal level of ground disturbance. Regrowth of vegetation will be enabled following temporary disturbance during installation/construction.

4.2.1.2 Medium Voltage Reticulation

Each inverter will be connected to the central 33kV switchboard by underground medium voltage cable reticulation. The cables will be installed in trenches not below 1m in depth and typically 1m in width. The excavation will comply with the Soil and Erosion Sediment Control Report and Regulations for construction within New South Wales. The medium voltage switchboard will be connected through a step-up transformer and connect to the overhead 132 kV distribution line, owned and operated by Essential Energy.

Temporary disturbances to vegetation from the underground installation of the cables will rehabilitate naturally.

4.2.1.3 Solar Substation

A high voltage substation will connect the Solar Farm to the national transmission network. The substation footprint will be approximately 100m x 80m. The substation will provide switching and protection of the electrical network and will be fenced separately from the Solar Farm for safety reasons. The T-connection into the existing transmission line will be owned and operated by the Network Operator, Essential Energy. This will form part of the National Electricity Network (NEM).

4.2.1.4 Battery Energy Storage System (BESS)

Based on an economic and technical assessment that will be undertaken during the Project's Connection Application phase with Essential Energy and the Australian Energy Market Operator (AEMO), the BESS would be located either:

- adjacent to the substation in the Impact Area; or
- dispersed in modular enclosures throughout the site, which is similar to the typical solar inverter enclosures.

The Project will utilise sealed lithium-ion batteries housed in a secure, climate-controlled Battery Energy Storage System (BESS). Subject to economic and technical considerations, the Project would include an approximate 100MW / 400MWh rated capacity battery storage system, with an enclosure design similar to Figure 13.



Figure 13 - Indicative battery storage system enclosures (Edify's Gannawarra Solar and Battery project)

4.2.1.5 Operation and Maintenance Facility

The proposed Operation and Maintenance (O&M) building will be a prefabricated design approx. 10m by 8m and single story. The facility will provide a working area for staff, ablutions and amenities including:

- Office
- Toilet
- Kitchen
- First Aid area
- Meeting room
- Reception area.

4.2.2 Construction

The Project is expected to operate for around 30 years. The construction phase of the Project is expected to take 12 – 18 months. During the peak construction period, a workforce of approximately 250 personnel will be required onsite.

Minor earthworks would be required for the preparation of the site, including minimal site levelling, laying of access track and site drainage works. Due to the relatively flat terrain of the Project area minimal site preparation and civil works are anticipated prior to construction. The PV arrays and site office components will largely be built off-site and transported to the site in modulated sections. Construction on-site will be limited to the unloading and joining together of the modulated sections and trenching electrical and control cabling to the electricity grid and control room. Construction activities are planned to occur during daylight hours only,

although there may be some works during the winter months where light/visibility will be poor during twilight. Access to the site will be from Cope Road.

4.2.3 Operation

During the operational phase of the Project, approximately four full-time jobs and a number of full-time equivalent roles that support the Project's operation will be required.

The primary activities conducted on site will include day-to-day routine operations, maintenance of infrastructure, and general site maintenance and security. Operation of the Solar Farm will also likely be supported by local contractors for tasks such as repairs, minor works, weed/vegetation management, fencing and cleaning.

The operational lifespan of the facility is expected to be circa 30 years, depending on the nature of solar PV and battery technology and energy markets.

4.2.4 End of Life

After the initial operating period, a decision will be made to either decommission or re-power the facility, subject to approval requirements.

If the Project is to be decommissioned, removing all above-ground infrastructure (and all infrastructure up to one metre below the surface of the Land) and return the site to its existing land capability. All above-ground structures built as part of the Project will be removed and the site rehabilitated generally to its pre-existing land use, as far as practicable. The disposal and recycling of project infrastructure will be completed in accordance with contemporary waste management legislation and practices at the time of decommissioning. As far as possible, efforts will be made to reduce wastes disposed to landfill, in line with best practice sustainability principles.

Alternatively, the Project may be upgraded and re-powered with new PV equipment. If re-powering the Project is agreed, an appropriate stakeholder consultation process will be undertaken, and all necessary approvals will be sought and aligned with relevant legislation at such time.

4.2.5 Capital Investment

The Project would have an estimated capital investment in excess of \$30 million, identifying the Project as a State Significant Development under Part 4 of the EP&A Act. The actual value of the Project will be in excess of \$250 million, with the total investment value largely determined by the duration of the battery energy storage system, which will be determined during the EIS stage of the development. A quantity surveyor's report would be prepared during the EIS process as part of the Project which would confirm the capital investment cost.

4.2.6 Subdivision

Engagements with Essential Energy are ongoing with respect to how the switchyard infrastructure is to be owned and operated. The area of land to be subdivided at the switchyard site is yet to be finalised, however initial plans contemplate the south-eastern aspect of Lot 70 in DP1251856. The land is zoned RU1 Primary Production with a minimum lot size of 400 ha therefore any proposed subdivision will require the approval of the Minister for Planning under the provisions of section 4.38 of the EP&A Act.

When land is leased from a landowner and the lease affects part of a lot or lots in a current plan, a subdivision under s.7A *Conveyancing Act 1919* (formerly s.327AA *Local Government Act 1919*, which is now repealed) is required when the total of the original term of the lease, together with any option for renewal, is more than five years. When the lease affects the whole lot in a current plan, the body of the lease identifies the area by lot and DP number with a subdivision not required.

As the Project will be executed via a long-term lease arrangement, subdivision for the purpose of the internal substation and battery facility may be required. Narromine Shire Council have indicated their support of subdivision in initial consultation with Edify. An easement may be created by means of an appropriate dealing registered in the NSW Land Registry Service or by the inclusion in a Section 88B instrument lodged with a new deposited plan.

4.3 Alternatives to the Project

4.3.1 Alternative Sites

Edify has reviewed the solar generation potential of many areas in NSW using a combination of computer modelling and analysis, on the ground surveying and observation, and experience of Edify in successfully developing projects in NSW and across Australia. The site was selected because it provides the optimal combination of:

- Low environmental constraints (predominantly cleared cropping land);
- Level terrain for cost-effective construction;
- High quality solar resource;
- Low density population and limited neighbouring properties;
- Suitable planning context;
- Acceptable flood risk;
- Road access;
- Access to the transmission network; and
- Available capacity on the grid transmission system.

The site is of a scale that allows for flexibility in design, allowing Edify to avoid ecological and other constraints that may be identified during the EIS process. The factors that determine the final design area would be detailed in the EIS.

4.3.2 Alternative Technologies

Photovoltaic solar technology was chosen because it is cost effective, low profile, durable and flexible regarding layout and siting. It is a proven and mature technology that is readily available for broad scale deployment at the site. Battery technology was selected over mechanical or physical storage methods because it enables modular installation without major infrastructure or specialised landform features. Batteries also generally have lower weight and physical volume and better scalability compared to other technologies.

4.3.3 The 'Do Nothing' Option

Not proceeding with the Project would forgo the benefits of the Project, resulting in:

- The loss of a source of renewable energy that would assist the Australian and NSW Governments to reach their targets;
- The loss of cleaner energy and reduced greenhouse gas emission;
- The loss of additional electricity generation and supply into the grid; and
- Loss of social and economic benefit through the provision of direct and indirect employment.

The 'do nothing' option may avoid any potential impact. However, the likelihood of significant negative impacts is low. It is considered the benefit of the proposed Solar Farm outweighs any potential impact whilst contributing to ecologically sustainable development.

5 Statutory Context

5.1 NSW Legislation

The relevant statutory requirements for the Project are summarised in Table 3. This table has been set out in accordance with the Scoping Report Guidelines and *State Significant Development - preparing an environmental impact statement - Appendix B* to the state significant development guidelines (DPIE 2021d) (EIS Guidelines). The following matters are considered:

- Power to grant consent (i.e., approval pathway);
- Permissibility;
- Other approvals consistent with the Project;
- Commonwealth approvals;
- Approvals not required (pursuant to Section 4.41 of the EP&A Act); and
- Mandatory matters for consideration.

Table 3 - Statutory Requirements

Approval	Requirement
Power to grant approval	
State Environmental Planning Policy (Planning Systems) 2021 (Planning Systems EPP) <i>Environmental Planning and Assessment Act 1979</i> (EP&A Act).	Section 20 of Schedule 1 of the Planning Systems SEPP states that the following is considered a SSD: <i>Development for the purpose of electricity generating works or heat or their co-generation (using any energy source, including gas, coal, biofuel, distillate, waste, hydro, wave, solar or wind power) that:</i> <i>(a) has a capital investment value of more than \$30 million, or</i> <i>(b) has a capital investment value of more than \$10 million and is located in an environmentally sensitive area of State significance.'</i> The Project would have a capital investment cost estimate of more than \$30 million. Therefore, the Project is classified as "State Significant Development" under division 4.7 of the EP&A Act. The Minister for Planning and Public Spaces is the consent authority for SSD, and SSD applications are assessed by DPE (unless specific conditions occur e.g., where 50 or more people have objected to the application, the local council has objected to the application; and/or the applicant has disclosed a reportable political donation, whereby the Independent Planning Commission (IPC) would be the consent authority.
Permissibility	
<i>State Environmental Planning Policy (Transport and Infrastructure) 2021</i>	Division 4, Section 2.35 and 2.36(1)(b) of the TISEPP states development for the purpose of electricity generating works may be carried out by any person with consent on any land in a prescribed rural, industrial or special use zone. Therefore, the Project is permissible with consent.

Approval	Requirement
(TISEPP)	
<i>Other State and Environmental Planning Policies that may be relevant</i>	<p>State environmental planning policy provisions will take precedence over the local provisions. However, local provisions will be considered by Edify during the EIS. Other relevant State and Environmental Planning Policies that may be relevant include:</p> <ul style="list-style-type: none"> – SEPP (Primary Production) 2021 (Part 2.2 addresses State Significant – Agricultural Land, not yet confirmed in Schedule 1 of the SEPP) – SEPP No. 33 – Hazardous and Offensive Development – SEPP No. 55 – Remediation of Land.
<i>Electricity Infrastructure Investment Act (2020)</i>	<p>The Survey Area is within the Central West and Orana Renewable Energy Zone, which is expected to be declared a REZ under Section 23 of the <i>Electricity Infrastructure Statement Act (2020)</i>.</p> <p>Edify has strategically located the Project within a region that AEMO and the NSW Government deems to be the priority region for new generation to connect. Edify will work with AEMO and NSW Energy Corporation to register the Project for future Long Term Service Agreements (LTESAs) and access rights, with auctions recently commenced in Q4 2022.</p>
Consistent approvals	
Overview	Section 4.42 of the EP&A Act outlines that the approvals listed below cannot be refused if necessary for carrying out an approved SSD and are to be consistent with the terms of the development consent for the SSD.
An environment protection licence under Part 3 of the NSW Protection of the Environment Operations Act 1997	<p>Section 48 of the <i>Protection of the Environment Operations Act 1997</i> requires an environment protection licence to undertake scheduled activities at any premises. Scheduled activities are defined in Schedule 1 of the <i>Protection of the Environment Operations Act 1997</i> and include the following premise-based activities that apply to the Project:</p> <p><i>17 Electricity generation</i></p> <p><i>(1) ...general electricity works, meaning the generation of electricity by means of electricity plant that, wherever situated, is based on, or uses, any energy source other than wind power or solar power.</i></p> <p><i>(2) Each activity referred to in Column 1 of the Table to this clause is declared to be a scheduled activity if it meets the criteria set out in Column 2 of that Table.</i></p> <p>The table referred to in Schedule 1, Clause 17 specifies 'general electricity works' with 'capacity to generate more than 30 megawatts of electrical power'. The Project will have a capacity that is greater than 30 MW and will therefore require an environment protection licence.</p>
An approval under Section 138 of the NSW Roads Act 1993	Under Section 138 or Part 9, Division 3 of the <i>Roads Act 1993</i> , a person must not undertake any works that impact on a road, including connecting a road (whether public or private) to a classified road, without approval of the relevant authority, being either Transport for NSW or local council, depending upon the classification of the road.

Approval	Requirement
	The interaction of the Project with the local and regional road network will be addressed in the EIS.
Commonwealth approvals	
<i>Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)</i>	<p>The EPBC Act aims to protect matters of national environmental significance (MNES). If an action will, or is likely to, have a significant impact on any MNES, it is deemed to be a 'controlled action' and requires approval from the Commonwealth Environment Minister or the Minister's delegate.</p> <p>A search of the Commonwealth Protected Matters Search Tool indicates that there are no World Heritage Properties or National heritage places within the vicinity of the site (refer Appendix J- Preliminary Biodiversity Assessment).</p> <p>The preliminary biodiversity assessment indicates there is potential for listed threatened species and listed migratory species to occur within the Study Area, and as such targeted surveys will be undertaken. Preliminary field surveys have indicated one PCT identified on site has potential to be representative of a threatened ecological community (TECs) listed under the EPBC Act, and a referral to the Commonwealth Department of Agriculture, Water and the Environment may be required following BDAR surveys.</p>
<i>Native Title Act 1993</i>	<p>The Commonwealth <i>Native Title Act 1993</i> recognises and protects native title rights in Australia. It allows a native title determination application (native title claim) to be made for land or waters where native title has not been validly extinguished, for example, extinguished by the grant of freehold title to land.</p> <p>Claimants whose native title claims have been registered have the right to negotiate about some future acts, including mining and granting of a mining lease over the land covered by their native title claim. Where a native title claim is not registered, a development can proceed through mediation and determination processes, though claimants will not be able to participate in future act negotiations.</p> <p>There are currently no native title determinations over the Study Area.</p>
Approvals not required	
Overview	Section 4.41 of the EP&A outlines the following approvals, permits etc are not required for an approved SSD.
<i>Fisheries Management Act 1994</i>	<p>A permit under the <i>Fisheries Management Act 1994</i> to block fish passage or dredge or carry out reclamation work on water land will not be required pursuant to Section 4.41 of the EP&A Act.</p> <p>The Project may require work in water land to facilitate the upgrade of road crossings or establish new crossings of watercourse within the Study Area. These works will be undertaken in accordance with NSW DPI <i>Policies and Guidelines on Fish-Friendly Waterway Crossings</i> (undated), <i>Policy and Guidelines for Fish Habitat Conservation and Management</i> (DPI 2013), and NSW <i>Guidelines for Controlled Activities</i>.</p>

Approval	Requirement
<i>Heritage Act 1977</i>	<p>An approval under Part 4, or an excavation permit under Section 139, of the <i>Heritage Act 1977</i> will not be required pursuant to Section 4.41 of the EP&A Act.</p> <p>Further, there are no listed heritage items within the Study Area.</p>
<i>National Parks and Wildlife Act 1979</i>	<p>An Aboriginal heritage impact permit under Section 90 of the <i>National Parks and Wildlife Act 1974</i> will not be required pursuant to Section 4.41 of the EP&A Act.</p> <p>There is potential for Aboriginal sites to occur within the Study Area. Any Aboriginal heritage sites identified within the Study Area will be avoided as far as practicable through the design process.</p>
<i>Rural Fires Act 1997</i>	<p>A bushfire safety authority under Section 100B of the <i>Rural Fires Act 1997</i> will not be required pursuant to Section 4.41 of the EP&A Act. However, a bushfire assessment in accordance with NSW Rural Fire Service <i>Planning for Bushfire Protection 2019</i> will be carried out to inform the EIS.</p>
<i>Water Management Act 2000</i>	<p>A water use approval under Section 89, a water management work approval under Section 90 or an activity approval (other than an aquifer interference approval) under Section 91 of the <i>Water Management Act 2000</i> pursuant to Section 4.41 of the EP&A Act.</p> <p>There are no watercourses occurring within the Impact Area, and as such construction works in or near a watercourse is not likely. Any works near or within the watercourses identified outside of the Impact Area will be carried out in accordance with DPIE's various guidelines for controlled activities.</p>
Other NSW approvals	
<i>Conveyancing Act 1919</i>	<p>The final Impact Area will require a separate lease from the owner of the affected land. Lease of a solar farm site is treated as a lease of premises, regardless of whether the lease will be for more or less than 25 years. The plan, which illustrates the Impact Area (Figure 4) will not constitute a 'current plan' within the meaning of Section 7A of the <i>Conveyancing Act 1919</i> and therefore will not require subdivision consent under Section 23G Conveyancing Act.</p> <p>Section 23G of the Conveyancing Act may also apply if subdivision for the purpose of construction, operation and maintenance of a substation is required.</p>
Section 1.3 of the EP&A Act	<p>Relevant objectives of the EP&A Act are:</p> <p><i>(a) to promote the social and economic welfare of the community and a better environment by the proper management, development and conservation of the State's natural and other resources,</i></p> <p><i>(b) to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment,</i></p>

Approval	Requirement
	<p><i>(c) to promote the orderly and economic use and development of land,</i></p> <p><i>(e) to protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats,</i></p> <p><i>(f) to promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage),</i></p> <p><i>(g) to promote good design and amenity of the built environment,</i></p> <p><i>(j) to provide increased opportunity for community participation in environmental planning and assessment.</i></p>
Section 4.15 of the EP&A Act	<p>Pursuant to Section 4.15 of the EP&A Act the consent authority must consider the following relevant matters for consideration:</p> <ul style="list-style-type: none"> • Relevant environmental planning instruments for the Project including: <ul style="list-style-type: none"> – State Environmental Planning Policy No. 33 Hazardous and Offensive Development; – State Environmental Planning Policy No 55 Remediation of land; – State Environmental Planning Policy (Infrastructure) 2007; – State Environmental Planning Policy (Koala Habitat Protection) 2020; and – Narromine Regional Local Environmental Plan 2011 (LEP). • Relevant development control plans for the Project including: <ul style="list-style-type: none"> – Narromine Regional Development Control Plan 2011 • the likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality; the suitability of the site for the development; and • the public interest. <p>The above will all be considered in the EIS.</p>
Mandatory considerations - Considerations under other legislation	
Biodiversity Conservation Act 2016	<p>The likely impact of the Project on biodiversity values as assessed in the biodiversity development assessment report. The Minister for Planning and Public Spaces may (but is not required to) further consider under that Act the likely impact of the Project on biodiversity values.</p>
Mandatory considerations - Environmental planning instruments	

Approval	Requirement
State Environmental Planning Policy No 55 – Remediation of Land, Clause 7	As the development will involve a change of use on land on which development for a purpose referred to in Table 1 to the contaminated land planning guidelines (agriculture) is being, or is known to have been, carried out, a report specifying the findings of a preliminary investigation of the land concerned carried out in accordance with the Managing Land Contamination Planning Guidelines (<i>DUAP 1998</i>).
State Environmental Planning Policy No 33 – Hazardous and Offensive Development, Clause 8	The EIS will consider the following relevant departmental guidelines: <ul style="list-style-type: none"> • Applying State Environmental Planning Policy No. 33 Hazardous and Offensive Development • HIPAP No. 3 – Risk Assessment • HIPAP No. 12 – Hazards
Narromine Local Environmental Plan (LEP) (2011)	The EIS will consider: <ul style="list-style-type: none"> • the relevant objectives and land uses for RU1 zone • Part 4 and relevant details for minimum lot sizes for subdivisions in Zone RU1 • Clause 6.1 Earthworks • Clause 6.6 Groundwater vulnerability • Clause 6.8 Essential Services, relating to the supply of electricity and suitable road access

5.2 Local Government

5.2.1 Narromine Shire Council's Local Environmental Plan 2011

The Project is in the Narromine Shire Council's LGA and is subject to the Narromine Shire Council's Local Environmental Plan 2011 (LEP). The aims of the LEP are:

- (a) to protect and promote the use and development of land for arts and cultural activity, including music and other performance arts,
- (b) to encourage economic development through tourism activities, business, employment initiatives and fostering industry growth,
- (c) to protect and conserve the natural environment including surface and ground water, soil, air and native vegetation by encouraging sustainable development,
- (d) to encourage sustainable agricultural practices, including intensive agriculture, by minimising land use conflicts and facilitating farm adjustments.

The proposed development is classified as electricity generating works and is located on land zoned RU1 – Primary Production under the LEP 2011.

While solar farm developments are not specifically referenced as a development permitted with consent, solar developments are not inconsistent with the objectives and principles of the LEP. Whilst the development will impact the availability of the land for primary production, it will sustainably harness a natural resource, namely solar energy, and will provide for a diversified economic stimulus and support to rural communities.

It is noteworthy that in accordance with Part 2.2 of SRD SEPP (2021), local Development Control Plans are not applicable to State Significant Developments. Notwithstanding, consideration will also be given to Narramine Shire Council's Development Control Plan (2011), particularly aspects listed in Chapter 5c (Solar Power in RU1 Zones).

5.3 Commonwealth Legislation

5.3.1 Environmental Protection and Biodiversity Conservation Act 1999

The EPBC Act provides an assessment and approval process for actions likely to cause a significant impact on Matters of National Environmental Significance (MNES). These include:

- World Heritage properties.
- National Heritage places.
- Wetlands of international importance (listed under the Ramsar Convention).
- Listed threatened species and ecological communities.
- Migratory species protected under international agreements.
- Nuclear actions (including uranium mines).
- Commonwealth marine areas.
- The Great Barrier Reef Marine Park.
- A water resource, in relation to coal seam gas development and large coal mining development.

Approval by the Commonwealth Environment Minister is required if an action is likely to have a significant impact on a MNES. Assessments of significance based on criteria listed in Significant Impact Guidelines 1.1 issued by the Commonwealth (Commonwealth of Australia 2013) are used to determine whether the proposed action is likely to have a significant impact (i.e. is likely to be considered a 'controlled action').

A search of the Commonwealth Protected Matters Search Tool (refer to Preliminary Biodiversity Assessment in Appendix J) indicated six threatened ecological communities, 38 threatened species and 15 migratory species in the search area (50km buffer). Studies to determine the presence and likelihood of impact to these species/communities would be undertaken during the preparation of the EIS.

A summary of the EPBC Act search report is provided in Table 4 and the full search results can be found in the OzArk's Preliminary Biodiversity Assessment in Appendix J.

Table 4 - Summary of EPBC Protected Matters Search Report

Protected Matter	Entities within the search area
World Heritage Properties	None
National Heritage Places	None
Wetlands of International Significance (Ramsar)	4
Threatened Ecological Communities	6
Threatened Species	32
Migratory Species	9

Protected Matter	Entities within the search area
Listed Marine Species	16
Commonwealth lands	1
Commonwealth Heritage places	None
Critical habitats	None
Commonwealth reserves (terrestrial)	None
State and Territory reserves	None
Regional Forest Agreements	None
Nationally Important Wetlands	None
EPBC Act Referrals	1
Bioregional Assessments	1

5.3.2 Native Title Act 1993

The *Native Title Act 1993* provides a legislative framework for the recognition and protection of common law native title rights. Native title is the recognition by Australian law that Indigenous people had a system of law and ownership of their lands before European settlement. Where that traditional connection to land and waters has been maintained and where government acts have not removed it, the law recognises this as native title.

People who hold native title have a right to consult or continue to practise their law and customs over traditional lands and waters while respecting other Australian laws. This could include visiting to protect important places, making decisions about the future use of the land or waters, hunting, gathering and collecting bush medicines.

Further, when a native title claimant application is registered by the National Native Title Tribunal, the people seeking native title recognition gain a right to consult or negotiate with anyone who wants to undertake a project on the area claimed. Where native title does exist in relation to the Project site, Edify will comply with the provisions of the *Native Title Act 1993*. A search of the National Native Title Tribunal website (NNTT 2018) indicates no native title claims, land use agreements, applications or determinations within the Impact Area.

6 Engagement

Edify is a long-term owner and operator of projects. This makes an important difference in our community engagement approach since we are establishing relationships with communities during the development phase that will endure for the lifetime of the Projects.

Community and stakeholder consultation will be integral to the Project. Edify has begun consultation with a wide range of relevant Local Government and State government agencies, neighbours, local businesses, community groups and other interested parties.

In accordance with the Social Impact Assessment Guidelines (2021), Edify has conducted the first phase of the SIA, which involves scoping an initial assessment, refining and planning for further engagements with local stakeholders. The SIA Worksheet is provided in Appendix B.

Refer to Appendix C for copies of correspondence with stakeholders. In addition, Table 5 summarises Edify's consultation and community engagement commitments.

Table 5 - Consultation and Community Engagement

Consultation Guide		
Phase	Actions/Tools	Stakeholders
Pre-lodgement and development of EIS	<ul style="list-style-type: none"> • FAQ's • Meetings – one on one Presentations • Local Contractor Presentation and EOI Register • Drop in session • Project email address • Project Website • Letterbox drop • Feedback collation and mitigation options 	<ul style="list-style-type: none"> • Community • Landowners • Council • Government departments • Neighbours • Local businesses • Media
EIS public exhibition and determination	<ul style="list-style-type: none"> • FAQ's • Drop in session • Letters • Letterbox drop status update 	<ul style="list-style-type: none"> • Community • Neighbours • Landowners
Post approval (assuming approval granted)	<ul style="list-style-type: none"> • Letters • Letterbox drop status update Local Contractor Presentation and EOI Register 	<ul style="list-style-type: none"> • Community • Local businesses • Neighbours • Landowners Council
Construction and commissioning	<ul style="list-style-type: none"> • Local consultation with landowners and neighbours • Local Council Presentations • FAQ's • Drop in session • Letters • Letterbox drop status update Support to landowner team 	<ul style="list-style-type: none"> • Community • Neighbours • Landowners • Council

Edify is preparing a Community Engagement Plan (CEP) to provide a framework to further engage with the community and stakeholders about the Project and ensure opportunities to provide input into the assessment and development process are understood. Stakeholders were identified as those potentially being impacted by the Solar Farm or having an interest in the Project itself. The CEP will set out the Project's community engagement approach and minimum requirements with interested parties including representative bodies (e.g. Narromine Shire Council, community groups, and neighbours to the site).

As the CEP is implemented, the following activities will occur:

- Keep the Burroway residents and broader community informed in all stages of the Project through media avenues including advertisements in local radio, television and newspaper.
- Face to Face meetings with adjacent landholders, stakeholders and concerned local residents as required.
- A project website including a 'News Room' that will be updated at each project milestone and email address to inform the broader community.
- Preparation and dissemination of a feedback form to better understand the community's sentiment toward solar development and the development of the Burroway Solar Farm proposal. This will be made available at meetings and on Edify's project website.
- Hold an information session during the Project stage providing access to specialists and project information.
- Develop and implement a benefit sharing scheme in consultation with the community.
- A public open day on the site would occur when the approved project commences operation.
- Establishment of a register to record contact with stakeholders including potentially affected landholders.

The CEP would aim to ensure that there is effective, ongoing liaison with the community.

Measures to reduce adverse impacts and promote positive impacts would be identified in the EIS and appropriate management plans developed for the Project. Agency consultation would also take place in accordance with any requirements of the SEARs.

6.1 Aboriginal Community Consultation

Edify Energy recognises the Wiradjuri People as the original custodians of the lands throughout Burroway and as such will be invited to undertake an Aboriginal cultural heritage assessment as part of this proposal's EIS.

The NSW DPE, Office of Environment, Energy and Science (formerly OEH), acknowledges that Aboriginal people are the primary determinants of the significance of their heritage. It is acknowledged that Aboriginal people should be involved in the Aboriginal heritage planning process and are the primary source of information about the value of their heritage. This includes the best management and conservation measures for Aboriginal heritage and the way in which their cultural information (particularly sensitive information) is used (OEH 2011:2). Edify Energy considers that proactive engagement and consultation with the local Aboriginal community is regarded as an integral part of the process of investigating and assessing Aboriginal cultural heritage.

As the Project's SEARs are being requested to inform the forthcoming EIS process, consultation with the Aboriginal community will be commenced under the due legislative process and accordingly undertaken as part of EIS studies. Aboriginal community consultation undertaken for this project will follow the Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW 2010) (Consultation Requirements). The Consultation Requirements outline a four stage Aboriginal consultation process and mandate specific timeframes for each stage.

6.2 Consultation to date

6.2.1 Adjacent Landholders

At the Associated Landholders request, the adjacent landowners within 5.0 km of the Study Area were initially contacted by the Associated Landholder to inform them of Edify's intentions. Edify then attempted to phone each of the 16 neighbours to provide preliminary details on the Project and offer them the opportunity to discuss further. Of the 16, Edify were able to speak to nine (9) on the phone, with a further one (1) having been indirectly communicated with through the Associated Landholder. The eight (8) non-associated receivers who nominated to receive an email then received an information pack containing the following information:

- Introduction to the company and the proposed project;
- Presentation of the design and development process of a solar and battery project in NSW;
- Potential land considered for the development;
- Frequently Asked Questions; and
- The contact email address and phone number of Edify's Project Manager.

During subsequent phone calls with Edify, R1, R2, R3, R4, R5, R6, R8, R13 and R14 indicated that they had no problem with the Project progressing and are happy to continue to receive updates throughout the planning phase. During the various phone discussions with adjacent neighbours, Edify's development team proactively provided information on common community concerns associated with similar projects, with key areas of discussion including:

- Visual amenity changes to the region and how they will be addressed in the Landscape and Visual Impact Assessment (LVIA);
- Site access roads and their usage;
- Potential noise and dust impacts on adjacent properties during construction;
- General health and wellbeing matters concerning the construction period; and
- Weed and vegetation management.

Other specific comments that came out of the discussions included:

- One neighbour has been in discussions with another developer and wanted to understand how projects and developers interact. This neighbour requested an in-person discussion, which was accommodated by Edify during their site visit on 16 February 2023.
 - The relevant project is still in early stages and will be considered during a cumulative impact assessment once more information is available.
- Two landholders flagged the proximity of the Inland Rail project, and queried Edify's knowledge of the timing of that project.
 - Inland Rail is a prominent project in the area and will be considered as a potential cumulative impact on transport infrastructure and accommodation during the EIS.

Additional meetings have been proposed as required or requested, tentatively scheduled for H1-2023, with broader community engagement to occur once the technical studies have progressed sufficiently and a suitable level of detail regarding impacts is available.

In order to plan further early-stage consultation, attempts will continue to be made to all neighbours that have been unable to be contacted within 5km (six non-associated receivers) to introduce the Project, with letters being mailed as a last resort to encouraged landholders to contact Edify for further discussion. During the EIS phase, Edify plans to meet with all neighbours within 5km of the Project and will maintain regular emails, calls and letters with non-associated receivers within 3km of the Project. Furthermore, Edify will identify and maintain regular contact with any non-associated receiver or community group that wishes to be updated on

a regular basis. All stakeholders will be encouraged to visit Edify's dedicated project website, to receive regular updates once the website is established during the EIS phase.

6.2.2 Essential Energy

Discussions with Essential Energy started in mid-2022 through the submission of a Preliminary Connection Enquiry. Confirmation was given of the available capacity on the transmission line for the connection of an additional generator subject to further precise studies. Discussions are ongoing between Edify and Essential Energy.

6.2.3 Narromine Shire Council

Edify met with Narromine Shire Council representatives on 23 January 2023 and has shared correspondence as the planning process matures. The main points discussed have been:

1. Ongoing development boundary refinement efforts to determine extend of impact area;
2. Consultation with neighbours;
3. Subdivision requirements;
4. Traffic volumes and access routes (Council directed Edify to the Roads Management Strategy (2022) for initial guidance on locally managed roads and noted the TIA will suitably inform upgrades required);
5. Potential upgrades to roads and intersections;
6. Potential visual impact from adjacent neighbours; and
7. Potential cumulative impacts from nearby developments.

6.2.4 State and Federal Members

In conjunction with community member engagements, a letter of information was sent on 10 January 2023 to the office of the Federal Member for the Parkes Electorate as well as the Member of Parliament of NSW for the Dubbo electorate (See Appendix C). Subsequent conference calls were held with the Federal Member for the Parkes Electorate on the 24 January 2023, and the NSW Member for Dubbo on 31 January 2023.

Both discussions were positive, with additional insight provided on other projects occurring within the region. There were no issues raised during discussions, however continued engagement was requested. The Edify Project Manager's contact details have been provided to be forwarded to any constituents who may be seeking further information.

6.2.5 Narromine Local Aboriginal Land Council (LALC)

In advance of the submission of this Scoping Report, Edify have consulted with the Narromine LALC and provided information on the proposed Project. Details of this communication are provided in Appendix C.

6.2.6 Industry

There are no identified industrial operations existing on the lands proximate to the Impact Area.

There is an exploration lease over the Study Area, with Sunrise Energy as the tenement holder. Edify corresponded with Sunrise Energy in January 2023 to understand Sunrise Energy's position on Edify's interest in the land (See Appendix C).

6.2.7 NSW Department of Planning and Environment (DPIE)

On 10 February 2023 Edify held a pre-lodgement meeting with NSW DPIE to discuss the draft Burroway Solar Farm Scoping Report. DPIE's comments regarding the submission were in relation to the following topics:

- Further commentary of community and local government consultation;
- Clarification of biodiversity impact;
- Investigations of access routes off Eumungerie Road;
- The inclusion of the outcomes of Preliminary Visual Assessment Tool provided in the Large-scale Solar Guidelines (2022);
- Commitments for soil and agricultural surveys; and
- Accommodation planning.
-
- Appendix C provides more details on each of the comments from DPIE and where they have been addressed in this report.

6.3 Community Investment

As a leading renewable energy developer, Edify Energy is committed to supporting the communities that host our clean energy projects with positive and lasting social, environmental and economic benefits.

During early consultation with Narromine Shire Council, Edify has acknowledged the need for a voluntary planning agreement which may establish an appropriate committee to oversee the delivery of a portion of revenue from the proposed Burroway Solar Farm back into the local community each year, for the life of the Solar Farm. These conversations will progress as the Project moves through the EIS process.

A Community Engagement Plan will also be created to support the EIS phase of the Project's development.

7 Preliminary Biodiversity Assessment

7.1 Methodology

A preliminary environmental risk assessment has been conducted to assist in the identification of key environmental matters that would require detailed assessment within the EIS. Risks were identified for both the construction and operation phase of the Project and analysed in relation to their possible consequence and likelihood of occurrence. From this analysis, some environmental matters were deemed to be key issues on the basis that they had the potential, without suitable mitigation, to have a significant impact on the environment.

The assessment is based on a desktop review and preliminary site inspection (involving initial flora and fauna surveys) to identify potential high-level constraints and major risks to the Project. A preliminary constraints map is provided in Figure 14, showing vegetation zones and Vegetation Integrity Plots in the Subject Land. This will be used to guide further detailed investigations and ultimately the site infrastructure layout. Constraints mapping will also be refined based on these investigations prior to submission of the EIS.

A summary of the key environmental impacts is provided in Section 7.2. The intent of the discussion is to demonstrate an understanding of the issues that require further environmental assessment and likely mitigation measures for these key issues. The potential impacts and management of other (less significant) issues are discussed in Section 7.3.

7.2 Proposed Assessment of Impacts

7.2.1 Biodiversity

The preliminary Ecology Survey Report (OzArk 2022) highlighted the ecological values of the Study Area. Based on the results of the Preliminary Ecology Survey Report, the Impact Area has been selected on the basis that it avoids native vegetation, refining the footprint to areas that have been extensively cleared and used for agricultural purposes, such as cropping, over a long period of time.

The primary constraint identified within the Study Area is associated with the vegetation zones surrounding the Subject Land and encroaching into the land in various sections, as well as the two areas of vegetation in the centre and Southern section of the lot (Figure 14). Any areas that contain mature vegetation or habitat features have had a 40m buffer applied to them been excluded from the development footprint. The only remaining impact to biodiversity is associated with the need for suitable access to be established off Eumungerie Rd. The establishment of this access may require some minor impacts to derived vegetation within the road reserve, however the access option with the least environmental impact will be selected as priority. Further survey of the area is anticipated as part of the EIS, and a full assessment of the impact to potential habitat and species in these areas would be conducted by a specialist 3rd party consulting group.

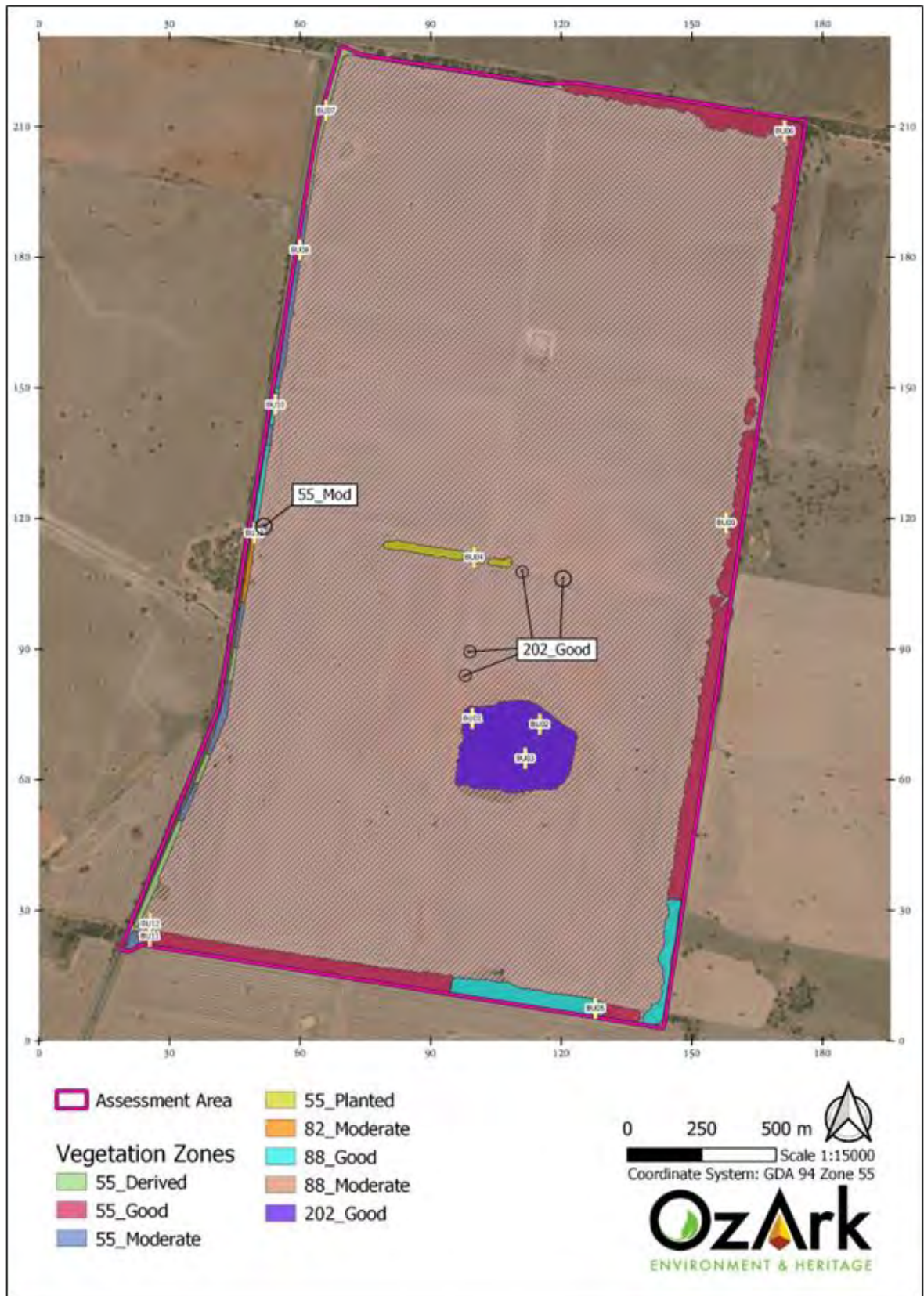


Figure 14 - Vegetation Zones present within the Impact Area

7.2.1.1 Methodology

Edify Energy has undertaken a preliminary constraints assessment of the Project to identify potential high-level constraints and major risks to the Project. Edify engaged OzArk Environment & Heritage (OzArk) to undertake a Preliminary Biodiversity Assessment of the Subject Land, inclusive of a 1500m buffer to establish a wider Study Area. In addition, OzArk was also commissioned to undertake a Land Category Assessment, to distinguish Category 1-exempt land within the Subject Land. OzArk completed these reports by undertaking desktop database searches, in addition to conducting a preliminary field assessment across two days, including 27 and 28 October 2022. A copy of the Preliminary Biodiversity Assessment inclusive of the Land Category Assessment can be found in Appendix J.

A Biodiversity Development Assessment Report (BDAR) will be completed after the SEARs have been received and a final Impact Area is determined.

The following is a summary of the desktop and field surveys completed to-date, features key biodiversity matters that may pose constraints within the Survey Area include:

- Plant Community Types listed as threatened under the NSW *Biodiversity Conservation Act 2016* (BC Act) or Commonwealth *Environment Protection and Biodiversity Act 1999* (EPBC Act).
- Threatened species listed under the BC or EPBC Act.
- Habitat for threatened species listed under the BC or EPBC Act.
- Prescribed biodiversity impacts under the Biodiversity Assessment Methodology (BAM).
- Biodiversity Values mapped under the BC Act.
- Serious or Irreversible Impacts (SAIL).
- Riparian and/or terrestrial corridors and connectivity and wetland inundation areas
- Groundwater Dependent Ecosystems

7.2.1.2 Flora

Plant Community Types

Under the NSW Department of Planning and Environment (DPE) Biodiversity Conservation and Sciences (BCS) Plant Community Type's (PCTs) are the lowest level of classification and the accepted standard for describing plant communities. Four PCTs were determined to occur within the Study Area, categorised into eight Vegetation Zones (Figure 14). The four (4) PCTs present within the impact area are present in varying broad condition states (such as good, moderate, derived and planted), which is likely a result of current and historical agricultural land-use.

Threatened Ecological Communities

The EPBC Act Protected Matters Search undertaken indicated six listed threatened ecological communities (TEC) had potential to occur within the 10km of the Subject Land (refer to Appendix of Preliminary Biodiversity Assessment in Appendix J):

- Coolibah – Black Box Woodlands of the Darling Riverine Plains and the Brigalow Belt South Bioregions
- Grey Box (*Eucalyptus microcarpa*) Grassy Woodlands and Derived Native Grasslands of South-Eastern Australia
- Natural grasslands on basalt and fine-textured alluvial plains of northern New South Wales and southern Queensland
- Poplar Box Grassy Woodland on Alluvial Plains
- Weeping Myall Woodlands
- White Box- Yellow Box- Blakely's Red Gum Grassy Woodland and Derived Native Grassland

Only portions of PCT 202 within the Subject Land could potentially meet criteria of the White Box- Yellow Box- Blakely's Red Gum Grassy Woodland and Derived Native Grassland TEC, which is also listed as a Critically Endangered Ecological Community under the BC Act. A preliminary assessment is provided in OzArk's Preliminary Biodiversity Assessment – Appendix B (Appendix J), which recommends fine-scale survey and mapping as part of the BDAR surveys to confirm the suitability.

EPBC guidelines recommend implementing a 30m protection buffer around each instance of the CEEC. In order to maintain the integrity of the CEEC, clearing activities should not be undertaken within this buffer.

If the vegetation zone potentially corresponding to the above TEC is confirmed suitable during further ecological surveys, a 30m protection buffer will be adopted by Edify as the Impact Area and infrastructure siting is progressed.

Threatened Flora Species

The EPBC Act search indicated 10 threatened flora species occur within 10km of the Subject Land. Whilst it is noted that no Threatened Flora Species have been identified within the Study Area, additional species may be identified during the BAM assessment and survey process.

Targeted Survey Requirements

Targeted surveys for threatened flora must be undertaken during the EIS phase, in accordance with the DPIE *Surveying threatened plants and their habitats. NSW survey guide for the Biodiversity Assessment Method (2020)*.

Survey methodology and timing for candidate flora species is presented in Appendix J. To cover survey requirements for all candidate species, three (3) survey periods would be required in September, October and January. Note, however, that if the final footprint omits certain PCTs, associated candidate flora species may also be eliminated and no longer require survey.

7.2.1.3 Fauna

Matters of National Environmental Significance

The EPBC Act search indicated 11 threatened bird species, 2 threatened reptile species, 1 threatened amphibian species, 3 threatened fish species and 5 threatened mammal species within a 10km radius from the Study Area. No threatened fauna species were recorded during the preliminary field survey.

The Preliminary Biodiversity Assessment completed by OzArk concluded all 3 threatened fish species and 1 threatened reptile species are not likely to occur on site due to the absence of close records and suitable aquatic habitat. These species are listed below:

- Trout Cod (*Maccullochella macquariensis*);
- Macquarie Perch (*Macquaria australasica*);
- Murray Cod (*Maccullochella peelii*); and
- Grey Snake (*Hemiaspis damelii*)

New South Wales Preliminary BAM-C Outputs

In total, the BAM-C generated 26 predicted ecosystem credit species for the identified PCTs. One of these, the White-bellied Sea-eagle (*Haliaeetus leucogaster*) could be discounted as an Ecosystem Credit species because of habitat constraints for foraging (the site is more than 1 km from a suitably large waterbody). The

remaining 25 species could not be ruled out on the basis of habitat constraints and cannot be ruled out by targeted surveys.

In total, 24 species credit species were generated by the BAM-C, with six species being ruled out due to key habitat constraints being absent from the Study Area, as listed below:

- Black-breasted Buzzard (*Hamirostra melanosternon*) – Subject land is not within 40 m of riparian woodland.
- Grey-headed Flying-fox (*Pteropus poliocephalus*) – No breeding camps recorded on site.
- Large Bent-winged Bat (*Miniopterus orianae oceanensis*) – No caves, tunnels, mines or other potential breeding structures on site.
- Regent Honeyeater (*Anthochaera phrygia*) – Subject land is not included in important habitat mapping.
- Swift Parrot (*Lathamus discolor*) – Subject land is not included in important habitat mapping.
- White-bellied Sea-eagle (*Haliaeetus leucogaster*) – No potential nesting trees occur within 1 km of a suitable waterbody.

Only two woodland areas corresponding with PCT 55 and PCT 202 (one remnant, one planted) occur inside the boundaries of the Subject Land, along with a small number of isolated paddock trees or shrubs. These are separated from the surrounding corridors by distances exceeding 300 m and are unlikely to contribute significantly to local connectivity.

The majority of the estimated final credit obligation is associated with PCT 55 and PCT 202. Edify are proposing to avoid impacts to these PCTs to mitigate impacts associated with these vegetation zones and their corresponding credit species.

7.2.1.4 SEPP (Koala Habitat Protection) 2020

The subject land is zoned RU1 within the Narromine LGA; consequently, Chapter 3 of the SEPP applies. No Koala Plan of Management exists for this region. The subject land possesses at least three known Koala food trees – Blakely's Red Gum (*Eucalyptus blakelyi*), Fuzzy Box (*Eucalyptus conica*), and Grey Box (*Eucalyptus microcarpa*). There are no records of the species within 10 km.

For these reasons, use of the subject land by Koalas is likely to be limited and the subject land is unlikely to constitute core Koala habitat.

7.2.1.5 Groundwater Dependent Ecosystems (GDEs)

The Bureau of Meteorology Atlas of Groundwater Dependent Ecosystems identified a single low-potential terrestrial GDE within the Survey Area.

There is a low potential for groundwater to be encountered during excavations and earthwork for the construction. This is likely to be highly localised and no inception of groundwater is considered. The Project does not include the extraction of groundwater; however, contamination from construction operations, could impact on the quality of groundwater if adequate mitigation measures are not taken.

7.2.1.6 Potential Impacts

The following impacts upon biodiversity have been considered as having potential to occur during the construction and operation of the Project:

- Clearing, removal and disturbance of vegetation, in particular paddock trees for accesses;
- Introduction and spread of invasive species and weeds;
- Increased risk of competition with regenerating native plants;
- Disturbance or displacement of fauna;

- Microclimate impacts due to shading, water availability, temperature, etc.; and
- Movement barrier and collision hazard by perimeter fencing.

7.2.1.7 Further assessment

A preliminary Biodiversity Assessment Methodology (BAM) Calculator was run in October 2022, to predict the credit species that may occur at the Subject Land if all areas within the property were to be impacted. It is notable that the Impact Area has been adjusted since this was undertaken to avoid the majority of the ecological values of the Study Area which will significantly reduce this calculation. A list of the species that will require surveys and the specified survey period to confirm presence/absence and for the purpose of quantifying credits has been developed by the ecologists. Additional species may be identified during the BAM assessment and targeted survey process. Further detailed information on the existing fauna values and potential impacts associated with the proposed development will be contained in the BDAR that will accompany the EIS.

A full floristic plot survey is required to determine the floristic composition, condition and EEC status of native vegetation at the Project site. Fauna survey and habitat assessment is also required to determine the potential for the presence of threatened fauna species and further habitat features such as tree hollows or stick nests. These surveys and assessments would be undertaken as part of the EIS, under the BAM. This would include the calculation of any biodiversity offset required for the Project.

7.2.2 Aboriginal Heritage

The Project area is within the Wiradjuri Region, whose people are the largest Aboriginal Nation in NSW. Wiradjuri people are originally from the land that spans a vast area in central New South Wales, on the plains running north and south to the west of the Blue Mountains Snowy Mountains.

A search of the Aboriginal Heritage Information Management System (AHIMS) on 28 July 2022 identified no Aboriginal sites and no Aboriginal places within the Survey Area and 1km buffer area. Refer to AHIMS search results in Appendix D.

Landforms, vegetation and soils over much of the Project site have been heavily disturbed by paddock levelling, grazing, track formation and clearing for agriculture. This is likely to reduce the potential for Aboriginal heritage places of significance in the affected areas. Conversely, unmodified areas with remnant woodlands exist within the site and are likely to have a higher potential for significance. It is noted that field assessment is required to confirm this and that any Aboriginal heritage sites/items/etc. identified would be a moderate to high constraint, requiring impact mitigation.

7.2.2.1 Aboriginal consultation

Edify's Project Manager engaged with the Narromine Local Aboriginal Land Council, introducing the company and proposed project, whilst seeking further engagement and collaboration. This was initiated by emails sent 10th January 2022, in addition to subsequent phone calls and a visit to the Land Councils offices. Evidence of this engagement is included in Appendix C.

During the EIS phase, additional consultation with Aboriginal stakeholders would be undertaken in accordance with clause 80C of the *National Parks and Wildlife Amendment (Aboriginal Objects and Aboriginal Places) Regulation 2010* following the consultation steps outlined in the Aboriginal Cultural Heritage Consultation Requirements for Proponents provided by OEH/NSW Heritage. A summary of the consultation process includes:

1. Registration of and initial consultation with Aboriginal community members.
2. Review of survey methodology by Registered Aboriginal Parties (RAPs).

3. Completion of field work and reporting.
4. Review of report by RAPs.
5. Report finalisation.

7.2.2.2 Potential impacts and Further Assessment

Construction has the potential to disturb unknown sites of Aboriginal cultural heritage significance. Impacts during operation and decommissioning are expected to be minimal.

An Aboriginal cultural heritage assessment (ACHA) and associated stakeholder consultation will be completed as part of the EIS. This would include further consultation with the Wiradjuri people (Narromine Local Aboriginal Land Council) as well as any other relevant stakeholders in accordance with the *Aboriginal Cultural Heritage Requirements for Proponents* (DECC 2010). Should any Aboriginal heritage sites be identified that may be potentially affected by the Project, mitigation measures will be determined in accordance with the *Guide to Investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (OEH 2011).

The required mitigation measures will be implemented during construction activities through a specific Cultural Heritage Management Plan as part of the Construction and Environmental Management Plan (CEMP) that would be prepared for the Project. Similarly, any ongoing management and mitigation measures would be implemented through an Operational Environmental Management Plan (OEMP).

7.2.3 Access, Traffic and Transport

The preferred access route to the Study Area is via Eumungerie Road, which is a designated Regional Road Council asset. Further technical studies completed as part of the EIS will investigate two potential locations along Eumungerie Road to identify the preferred access location. Figure 4 describes the areas currently being investigated for access.

During consultation, Narromine Shire Council commented that a high level of detail provided in the Traffic Impact Assessment (TIA) of the EIS would be required to inform any road upgrades, however, directed Edify to the Roads Management Strategy (2022) for initial guidance on locally managed roads.

For additional intrastate logistics, which illustrate the approved highway networks between Dubbo and the Study Area, see Appendix E for the NSW Combined Higher Mass Limits (HML) and Restricted Access Vehicle (RAV) maps.

7.2.3.1 Potential impacts and Further Assessment

During construction there will be a temporary increase in traffic along Dubbo-Burroway Road and Eumungerie Road and the local road network as components are brought to site and construction workers travel to/from the site. This will indirectly lead to some increase in localised noise levels during the main construction period. Traffic management during construction will also need to consider activities during key agricultural activities such as harvesting periods, peak tourism seasons and the associated vehicle movements and their timing. In addition, site access may require widening of existing access tracks, or the establishment of new access tracks to accommodate the delivery of materials to site.

Traffic impacts during operations will be minimal, with approximately four full-time staff at the Solar Farm. Traffic is predicted to be limited to employee vehicle movements for full-time staff, plus a small number of daily vehicle movements associated with ongoing maintenance and associated activities performed by local contractors/consultants.

During the decommissioning phase, a temporary increase in construction traffic would be expected as infrastructure is removed.



Figure 15 - View from Cope Road and Proposed Access (Option A)

A detailed Traffic Impact Assessment (TIA) will be included as part of the EIS, implementing the SEARs requirements provided by Narromine Shire Council and Transport for NSW Department. The TIA will identify the impacts and assess the significance of any impacts on the road network and community during construction, operation and decommissioning phases. The TIA will also consider the requirement for road upgrades, including turn treatments for main access/es off Eumungerie Road. The required mitigation measures would be implemented during construction and operational activities through implementation of detailed Traffic Management Plan (TMP) that would be prepared for the Project for each relevant phase.

7.2.4 Visual Amenity and Landscape Character

The Project has potential to result in visual impacts to neighbouring houses and traffic accessing Eumungerie Road. However, the Project infrastructure is unlikely to be visible to road users accessing Dubbo-Burroway Road. The site is located within a rural area with large rural-homestead lots and lots for agricultural production.

There are sixteen (16) potentially sensitive receivers within 5 km of the Study Area (see Figure 10). The closest sensitive receivers are located 1,795m south (R1) from the Study Area. The intermittent tree cover will act to limit long range views in the locality, in addition to the flat terrain.

It is noted that solar panels are designed to absorb as much sunlight as possible, with the use of anti-reflective coating boosting energy yield whilst decreasing normal incidence reflectance to less than 1% (generally 4% per Fresnel's equation, when anti-reflective coating is not used). They therefore reflect a very low percentage of the light and are not considered likely to result in glare or reflections that would affect traffic or nearby receivers.

7.2.4.1 Preliminary Visual Assessment

The Study Area ranges in elevation (AHD) from 266m to 276m, with the elevation within 4km ranging up to 288m. Table 6 and Figure 16 describe the outcomes of the preliminary visual assessment undertaken of all public and private (sensitive receiver) viewpoints within 2.5km and 4km of the Study Area as per the method described in the Section 3.1 of the NSW Technical Supplement - Landscape and Visual Impact Assessment.

Public Viewpoints (PV) one and three were selected at representative points on public roads within the vicinity of the Study Area, and PV1 was selected to be representative of the highest point of the proposed Inland Rail corridor. Private viewpoints (R) are based on known residences.

Table 6 - Preliminary Assessment of Public or Private Viewpoints

Receiver	Horizontal Field of View	Vertical Field of View	Classification of Impact
Within 2.5km			
PV1	130 °+	4°	Assessment required
PV2	41°-50°	1°	No assessment required
PV3	21-30°	1°	No assessment required
PV4	41°-50°	1°	No assessment required
R1	41°-50°	1°	No assessment required
R2	11-20°	0°	No assessment required
R3	11-20°	0°	No assessment required
R4	11-20°	0°	No assessment required
R5	11-20°	0°	No assessment required
R6	21-30°	0°	No assessment required
Within 4km			
R7	21- 30°	0°	No assessment required
R8	21- 30°	0°	No assessment required
R9	21-30°	0°	No assessment required
R10	11-20°	0°	No assessment required

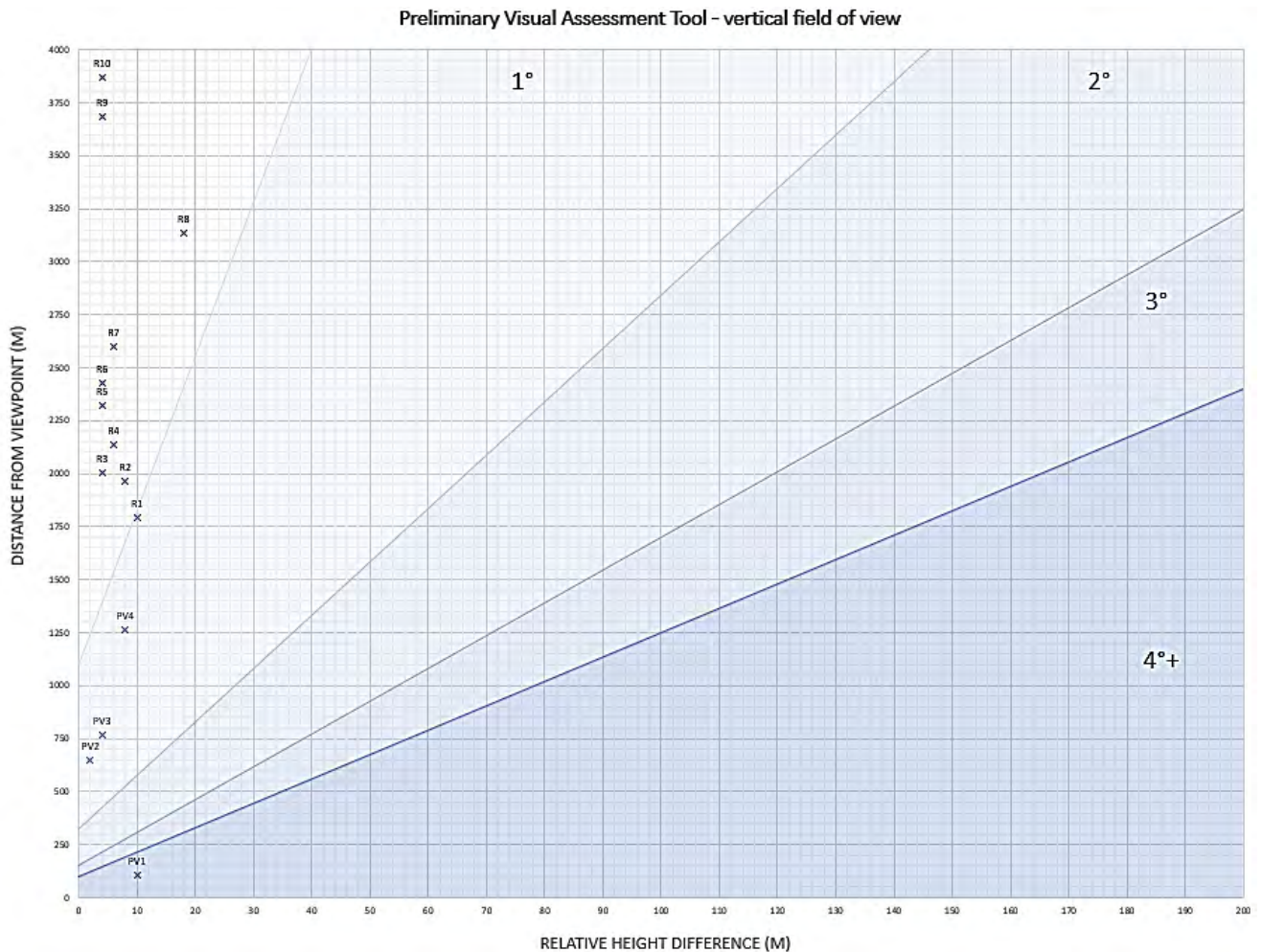


Figure 16 - Preliminary Visual Impact Assessment Tool

7.2.4.2 Further assessment

A complete landscape and visual impact assessment, including photo montages and community consultation, will be prepared as part of the EIS to investigate visual impacts and mitigation options. Particular consideration will be given to the heightened risk of potential visual impact viewpoints identified in the preliminary assessment. Additional consultation with specific affected residences would be undertaken to identify the nature and significance of impacts and the need for mitigation measures. The level terrain improves the potential effectiveness of vegetation plantings as screening around the site.

7.2.5 Noise

Existing background noise levels within and surrounding the Impact Area are likely to be low and typical of the rural setting. Sources of background noise would include vehicle use along Dubbo-Burroway Road and Eumungerie Road, in addition to equipment used on adjacent rural landholdings.

There are 16 potentially sensitive receivers within 5 km of the Impact Area (Figure 10). Noise impacts, for the most part, only occur during construction (generated by construction vehicles and machinery), with minimal noise likely to be generated during operation. Edify and the construction contractor will adopt best practice mitigation measures during construction such as standard work hours and regular vehicle and machinery maintenance to reduce the risk of adverse noise impacts.

During the operation of the Project, low level noise would be potentially produced by the solar tracking system, the substation and switchgear, battery, and any maintenance works undertaken at the site. Noise impacts during operation of the Solar Farm are expected to be very low or, in any case, not expected to be discernibly different than those existing in the surrounding rural environment.

7.2.5.1 Further assessment

A construction and operational noise assessment would be undertaken as part of the EIS to assess potential noise impacts. The assessment would be undertaken in accordance with the *Interim Construction Noise Guideline* (DECC 2009) and *NSW Noise Policy for Industry* (NSW EPA 2017).

7.2.6 Land Use and Resources

The rural land within the region is used primarily for agricultural grazing and homesteads. The Impact Area comprises one large rural paddock which has been largely cleared for pastures and grazing. Land and agricultural activities like those of the Study Area are widespread in the region.

The *Mining, Petroleum, Production and Extractive Industries State Environmental Planning Policy 2007* (the Mining SEPP) extends across the Project. The land is not classed as BSAL or CIC in the Mining SEPP Strategic Agricultural Land Map; BSAL has been described as land with high quality soil and water resources capable of sustaining high levels of productivity, while CIC are concentrations of highly productive industries within a region that are related to each other, contribute to the identity of that region, and provide significant employment opportunities.

The land and soils are defined as Class 3 under the *Land and Soil Capability Assessment Scheme* (OEH 2012), which has moderate limitations for high impact land uses. Limitations can be managed by specialised management practices with a high level of knowledge, expertise, inputs, investments and technology.

There is an Exploration Lease for minerals over the Study Area indicated in the NSW Planning Portal (DPIE 2023). Sunrise Energy, the holder of EL8961, will continue to be engaged through the Project's development.

7.2.6.1 Further assessment

For the construction period, there would be a complete reduction in agricultural activities within the Impact Area. During the operational phase, not all agricultural activities would be precluded, and it is highly likely that limited production such as occasional grazing could continue. This would be further explored in the EIS.

The Project would be decommissioned at the end of its operational life, removing all above and below-ground infrastructure up to one-meter below ground. It is expected that the land would be returned to its prior production uses, as Solar Farms and battery projects typically do not have significant permanent impacts to soil and landform. Overall, the adverse impacts related to alienation of resources are expected to be low and restricted only to the period of operation.

A soils and agricultural study has been pre-emptively commissioned by Edify as per the Large-Scale Solar Energy Guideline (2022), with any potential impact on agricultural production in the locality and region to be provided in detail in the EIS.

7.2.7 Cumulative Impacts

Cumulative impacts, for the purpose of this assessment, relate to the combined potential effects of different types of impacts (e.g. traffic combined with noise, reduction in available accommodation, etc.) as well as the potential for combined impacts with other significant projects either under construction or already established land uses in the local area.

A review of the NSW Major Project database for the Narromine LGA and surrounding region was undertaken and identified the following major projects that may be relevant to the proposed Burroway Solar Farm.

Ongoing energy related proposals:

1. The proposed 100MW Narromine BESS, proposed by Edify Energy, has received SEARs and is currently preparing the EIS (SSD-50701505). The project is ~30km south of the Study Area. Edify will develop these projects in parallel and will consider cumulative efficiencies and impacts.
2. The proposed 28 MW Yarren Hut Solar Farm, proposed by BaywaRe, received an approved EIS in January 2021 [SSD-10415]. The Project is located approximately 139km to the west of the Study Area. Edify will continue to monitor and consider this project for potential cumulative impacts to the Project.
3. The proposed Project Constellation (Tritton Copper Operation), proposed by Tritton Resources, lodged a Scoping Report in May 2022 [SSD- 41579871]. The Project is to expand the resource deposit and mining opportunities associated with the existing mining activities, which is located approximately 170km west of the Study Area. Edify will continue to monitor and consider this project for potential cumulative impacts to the Project.
4. The proposed 110 MW Forest Glen Solar Farm, proposed by X-Elio, submitted an EIS and associated material in early 2022 as part of SSD- 9451258. The Project is located approximately 22km south of from the Study Area. Edify will continue to monitor and consider this project for potential cumulative impacts to the Project.
5. The proposed 300 MW Wellington North Solar Farm, proposed by Lightsource BP, received an approved EIS in April 2021 [SSD-8895]. The Project is located 73km south-east from the Study Area. Edify will continue to monitor and consider this project for potential cumulative impacts to the Project.
6. The proposed 500 MW Wellington South Battery Energy Storage System, proposed by Ampyr Australia, submitted a Scoping Report in September 2021 (SSD- 27014706). The Project is located 75km south-east from the Study Area.
7. The proposed Dubbo Gas Energy Storage System, proposed by Energy Transition Solutions, submitted a Scoping Report in September 2021 (SSD- 28088034). The Project is located 29km east from the Study Area.
8. The proposed 200 MW Orana Battery Energy Storage System, proposed by Akaysha, submitted a Scoping Report in June 2022 (SSD- 45242780). The Project is located 75km south-east from the Study Area.
9. The proposed 120 MW Apsley Energy Storage System, proposed by ACEnergy, received SEARs in March 2022 (SSD-35160796) and is considered an early-stage development consideration. The Project is located approximately 83 km south-east from the Study Area.
10. The proposed 750 MW Sandy Creek Solar Farm, proposed by Lightsource BP, submitted a Scoping Report in April 2022 (SSD- 41287735). The Project is located 84km east of the Study Area.
11. The proposed 125 MW Maryvale Solar Farm, proposed by Wirsol, received an approved EIS in December 2019 (SSD-8777). The Project is located approximately 64km south-east from the Study Area. Edify will continue to monitor and consider this project for potential cumulative impacts to the Project.

12. The proposed Tomingley Mine, proposed by Alkane Resources, submitted an EIS and associated material in early 2022 as part of SSD-9176045. The Project is located approximately 52km south from the Study Area.
13. The proposed 600 MW Birriwa Solar Farm, proposed by UPC/AC, submitted an EIS in September 2022 (SSD-29508870) and is considered an early-stage development consideration. The Project is located approximately 110 km east from the Study Area.
14. The proposed 500 MW Tallawang Solar Farm, proposed by RES, submitted an EIS in August 2022 (SSD-23700028) and is considered an early-stage development consideration. The Project is located approximately 110 km east from the Study Area.

It is unlikely that all projects will eventuate and/or enter the same construction period. Notwithstanding, Edify will continue to monitor and consider these projects for potential cumulative impacts to the Project.

Ongoing non-energy related proposals include several large projects located near the Study Area. These include the operational Dubbo Quarry (located approximately 33 km south-east of the Project Area) and the CWO REZ transmission infrastructure, proposed by TransGrid, which is currently in the planning phase, and will be located east of the Project.

7.3 Other Environmental Issues

There are a range of potential environmental issues associated with the Project which are not considered to be key issues. These are considered secondary issues for investigation, given the characteristics of the Project and the availability of appropriate safeguards for mitigation. These issues are outlined in Table 7 below. The impacts and any required mitigation relating to these issues would be addressed at an appropriate level of detail in the EIS, and in response to relevant requirements outlined in the SEARs.

Table 7 - Other Environmental Issues

Existing Environment	Potential Impacts	Management and Mitigation
Soils		
<p>The nearest eSpade soils profiles (OEH, 2023) are off the Dubbo-Burroway Road, approximately 2km south of the Impact Area (Survey Number: 1000565). This notes a soil type of 'Haplic eutrophic red chromosol and Red-brown earth soils'. The soil hydrology profile is slowly permeable and imperfectly draining.</p> <p>Layer 1 to Layer 3 soils are classified from coarse sandy loam to fine medium sandy clay, respectively. The structure is massive to moderate pedality.</p>	<p>Construction activities would include minor excavations and vegetation removal which have the potential to cause soil erosion, sedimentation and dust issues.</p>	<p>The design would provide all weather access at the site during construction and operation to avoid erosion/sedimentation impacts and tracking of soil, in particular after rain events.</p> <p>Soil surveys are currently underway, and the EIS will provide thorough consideration of soil impacts, runoff and potential for erosion and proposed mitigation measures during construction and operation.</p>
Historic Heritage		
<p>A search of the Australian Heritage Database on 27 January 2023 identified 6 records in the Narromine LGA (Appendix F). The closest listed heritage items are in the township of Narromine, including the Butcher's Shop and Railway Station. <i>There are 4 registered Indigenous Places, which do not include a specific location.</i></p>	<p>Edify considers there to be a low risk of impact to heritage items.</p>	<p>The heritage status of the site would be assessed during fieldwork undertaken as part of the archaeological assessment. Appropriate management measures would be implemented if required.</p>
Contamination		
<p>The EPA contaminated land register identified no contaminated sites within the Narromine LGA (Appendix G).</p>	<p>There is potential that contaminants may be uncovered during excavation activities at the site.</p>	<p>Risks associated with contamination at the site are considered low and therefore no detailed investigation is likely to be required within the EIS. The mitigation measures would require a</p>

Existing Environment	Potential Impacts	Management and Mitigation
<p>Contamination associated with agricultural activities (e.g. pesticides, petrochemicals) or asbestos construction or insulation materials may still be present on the site.</p>		<p>CEMP to be prepared to manage any contamination identified during site construction.</p>
<p>Air quality</p>		
<p>The air quality in the Study Area is expected to be good and typical of rural settings in NSW with low population density and few industrial pollution sources. Existing sources of air pollution are expected to include vehicle emissions, dust from industrial (mining) practices and smoke from seasonal stubble burning. During colder months, solid fuel heating may result in a localised reduction in air quality, particularly if temperature inversions operate overnight.</p>	<p>The construction of the Project is not anticipated to have a significant impact on air quality and would mostly be related to dust during dry periods and vegetation removal. Impacts to air quality during operation would be negligible.</p>	<p>The mitigation measures would require a CEMP to be prepared to manage air quality impacts during the construction phase. There is an opportunity to improve local air quality by maintaining ground cover vegetation under the panels. Water tanks will also be utilised during the Project's construction phase, in order to suppress potential dust impacts.</p>
<p>Hazard and risk – electric and magnetic fields (EMF)</p>		
<p>Existing powerlines produce EMF at the site. Additional infrastructure which forms part of the Project such as connecting powerlines and substation would produce additional electromagnetic emissions at the site.</p>	<p>The substation, battery storage and network connection would be located on the Project site. The powerlines constructed as part of the Project would not pass through any neighbouring properties. The EMF that would be generated by the proposed powerlines, battery storage and substation is expected to be below the guideline for public exposure and would not be expected to have an adverse impact on human health.</p>	<p>The EMF levels of the proposed powerlines, battery storage and substation would be assessed as part of the EIS.</p>

Existing Environment	Potential Impacts	Management and Mitigation
<p>Battery storage is proposed to integrate with the Solar Farm's solar PV generator</p>	<p>Batteries pose a potential fire or contamination risk to the site.</p>	<p>An assessment of hazard and risk would be assessed in the EIS as per SEPP 33 – Hazardous and Offensive Development. A Preliminary Hazards Assessment would be undertaken to assess SEPP 33 requirements.</p> <p>Proactive engagement with both Rural Fire Service NSW and NSW Fire & Rescue will be undertaken during the EIS preparation phase.</p>
Hazard and risk - bushfire		
<p>The Impact Area has been predominantly cleared for agriculture. The site has however been identified as being within a bushfire prone area on NSW Rural Fire Service mapping (Appendix H).</p>	<p>The Project is unlikely to be affected by bushfire or pose a significant bushfire risk.</p>	<p>In addition to the Preliminary Hazards Assessment described above, the impacts and risks of a bushfire, gas explosion or leak would be assessed in the EIS.</p>
Social and economic impacts		
<p>The Project is located within the Narromine Council's LGA.</p> <p>In September 2022 the Narromine LGA had a population of 6,488. The region supports 2,188 jobs with the main industries of employment include agriculture, construction, retail and tourism. The unemployment rate in September 2022 was 3.9%.</p> <p>Narromine has a number of other major projects occurring within the region which may contribute to cumulative impacts including Inland Rail.</p>	<p>The Project may reduce the availability of agricultural land, but would generate economic benefits during construction and operation, including local direct and indirect employment opportunities outside of agricultural activities. Other socio-economic impacts would include traffic and access, noise, air quality and visual impacts.</p> <p>Workforce accommodation would be required for approximately 250 workers during peak construction periods. A large majority of these</p>	<p>The EIS would assess the full suite of potential social and economic impacts of the Project, engaging with stakeholders across the region to understand the full suite of risks.</p> <p>Edify will monitor and engage with hospitality and accommodation facilities and monitor if the timing of other projects within the region may cause cumulative stressors. This will include the development of a preliminary workforce accommodation plan as part of the EIS, and</p>

Existing Environment	Potential Impacts	Management and Mitigation
	<p>would already reside locally. For visiting workers, accommodation can be sought from Dubbo, Narromine or other towns within a 100 km radius. There is a moderate probability for a shortage in accommodation for construction workforces.</p>	<p>the refinement of this plan during the construction scheduling phase of the Project.</p>
<p>Utilities</p>		
<p>Transmission Network Service Provider (TNSP) TransGrid and Distribution Network Service Provider (DNSP) Essential Energy, manage and operate the high voltage electricity network in this region of NSW.</p> <p>Both TransGrid and Essential Energy have restrictions on development within powerline easements. For example, TransGrid guidelines state that activities and encroachments are prohibited within a transmission line easement, including ‘the installation of fixed plant or equipment’, and ‘the placing of obstructions within 30 metres of any part of a transmission line structure or supporting guy wire’.</p> <p>Roads or tracks within 20 metres of the centre-line of a transmission line 132 kV are prohibited, although roads that cross the transmission line as a thoroughfare may be permitted.</p>	<p>The proposed works would involve works adjacent to the Transgrid utility. One of the access options may also require crossing the transmission corridor. The Solar Farm proposes to connect to the Essential Energy electricity network.</p>	<p>The EIS would assess the Project against the setback and approval requirements of TransGrid and Essential energy. The Solar Farm would be designed to comply with required setback, approval and consultation requirements of both network operators.</p>

Existing Environment	Potential Impacts	Management and Mitigation
<p>Waste Management</p> <p>The Project would generate several waste streams and utilise a variety of materials during the construction phase.</p>	<p>During construction, excavated material and green waste would be generated as waste. Packaging from panels and other components would require disposal. Limited operational waste would be associated with the Project.</p>	<p>A Waste Management Plan would be incorporated into the CEMP, applying the principles to avoid, re-use and recycle to minimise wastes. Whilst efforts have been taken to limit the quantity of vegetation disturbance, any cleared trees would be repurposed as fauna habitat where possible.</p>
<p>Watercourses and Hydrology</p> <p>No watercourses are mapped as occurring on the subject land. Three watercourses occur within the survey area. All are Strahler 1st order minor, non-perennial streams.</p> <p>No streams mapped as Key Fish Habitat by the Department of Primary Industries – Fisheries occur within the study area.</p> <p>Artificial dams occur within the subject land. These were not observed to possess native flanking vegetation and are likely to offer only limited wetland habitat.</p> <p>The Bureau of Meteorology Atlas of Groundwater Dependent Ecosystems identifies a single low-potential terrestrial GDE within the subject land. No moderate- or high-potential GDEs are predicted to occur within the site.</p>	<p>The Project does not include the extraction of groundwater; however, contamination from construction operations could impact on the quality of groundwater if adequate mitigation measures are not taken</p>	<p>The EIS would assess the impacts to hydrology during construction and operation and include a flood impact assessment and appropriate mitigation measures as required.</p> <p>The largest dam within the site will be retained.</p>

8 CONCLUSION

The Preliminary Environmental Assessment has outlined the proposed Burroway Solar Farm and established the environmental and planning context of the Project. The Project would be assessed under State Environmental Planning Policy (Planning Systems) 2021 (Planning Systems EPP).

The report has been prepared to assist the development of the SEARs for the Project, which will guide the preparation of the EIS. The report identifies the following key environmental issues associated with the Project, based on the preliminary investigations:

- Biodiversity
- Aboriginal Heritage
- Access, Traffic and Transport
- Visual amenity & Landscape Character
- Noise
- Agricultural Impact Assessment
- Land use and Resources; and
- Cumulative Impacts

These aspects will be assessed in detail in the EIS. It is likely that other issues such as soil values, traffic impacts and natural hazards can be readily addressed by appropriate mitigation and management measures. The relevance and importance of issues would be reviewed throughout the EIS process.

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