



Bendemeer Solar Farm

Submissions Report

PREPARED FOR



Athena Energy Australia (Holdings)
Pty Ltd

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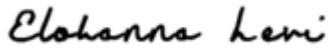
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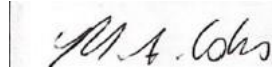
Submissions Report

Submissions Report



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ACRONYMS AND ABBREVIATIONS

Acronyms	Description
AC	Alternating Current
ACHAR	Aboriginal Cultural Heritage Assessment Report
AEMO	Australian Energy Market Operator
AHIMS	Aboriginal Heritage Information Management System
APAC	Asia-Pacific
APZ	Asset Protection Zone
BAM	Biodiversity Assessment Method
BAM-C	Biodiversity Assessment Method Calculator
BCS	Biodiversity Conservation Science Directorate (now CPHR)
BDAR	Biodiversity Development Assessment Report
BESS	Battery Energy Storage System
BOS	NSW Biodiversity Offset scheme
CBF	Community Benefit Fund
CEC	Clean Energy Council
CEMP	Construction Environmental Management Plan
CEEC	Critically Endangered Ecological Community
CNVMP	Construction Noise and Vibration Management Plan
CPHR	Conservation Programs, Heritage and Regulation Group of DCCEEW
CSIRO	Commonwealth Scientific and Industrial Research Organisation
CTMP	Construction Traffic Management Plan
DC	Direct Current
DCCEEW	Department of Climate Change, Energy, the Environment and Water
DPE	Department of Planning and Environment (now DCCEEW or DPHI)
DPHI	Department of Planning, Housing and Infrastructure
DPI	Department of Primary Industries
EA	Economic Assessment
EIS	Environmental Impact Statement
EMF	Electromagnetic fields
EMP	Emergency Management Plan
EPBC	Environment Protection and Biodiversity Conservation
EPL	Environmental Protection Licence
ERM	Environmental Resources Management
ESD	Ecologically Sustainable Development

Acronyms	Description
ESG	Environmental, Social and Governance
ESIP	Emergency Services Information Package
FEBQ	Fire Engineering Brief Questionnaire
FIA	Flood Impact Assessment
FMP	Fire Management Plan
FRNSW	Fire and Rescue NSW
FSS	Fire Safety Study
FTE	Full Time Equivalent
ha	Hectare
HIPAP	Hazardous Industry Planning Advisory Paper
HNSW	Heritage New South Wales
HV	High voltage
IFSR	Initial Fire Safety Report
IPC	Independent Planning Commission
ISP	Integrated System Plan
km	kilometre
kV	kilovolt
LEP	Local Employment Plan
LFP	Lithium Iron Phosphate
LGA	Local Government Area
LUCRA	Land Use Conflict Risk Assessment
LSC	Land and Soil Capability
LVIA	Landscape Visual Impact Assessment
MEG	Mining, Exploration and Geoscience
MW	Megawatt
NIA	Noise Impact Assessment
NMC	Nickel-Manganese-Cobalt
NPI	Noise Policy for Industry
NSW	New South Wales
O&M	Operations and Maintenance
OSOM	Oversize Overmass
PAD	Potential Archaeological Deposits
PCT	Plant Community Type
PCU	Power Conversion Units

Acronyms	Description
PHA	Preliminary Hazard Assessment
PV	Photovoltaic
VPA	Voluntary Planning Agreement
RAP	Registered Aboriginal Party
REZ	Renewable Energy Zone
RFS	Rural Fire Service
SAIA	Soils and Agricultural Impact Supplementary Assessment
SAII	Serious and Irreversible Impact
SCADA	Supervisory Control and Data Acquisition
SEP	Stakeholder Engagement Plan
SHI	Statement of Heritage Impact
SIA	Social Impact Assessment
SISD	Safe Intersection Sight Distance
SSD	State Significant Development
SSI	State Significant Infrastructure
SWMP	Soil and Water Management Plan
T&I SEPP	Traffic and Infrastructure State and Environmental Planning Policy
TfNSW	Transport for NSW
TIA	Traffic Impact Assessment
TMP	Traffic Management Plan
TRC	Tamworth Regional Council
WAL	Water Access License
WAS	Workforce Accommodation Strategy
WMP	Waste Management Plan

1. INTRODUCTION

This section provides an introduction to the Project, including the layout and Project elements to provide context for the submissions responses. It also includes an overview of the assessments carried out since EIS exhibition as part of the Applicants due diligence or in response to issues raised in submissions.

1.1 BACKGROUND

Athena Energy Australia (Holdings) Pty Ltd ('Athena' or 'Applicant') proposes to construct, operate, maintain, and decommission the Bendemeer Solar Farm (the Project) near Bendemeer, NSW. The Project is entirely located within the Tamworth Regional Local Government Area (LGA) in the New England Region of NSW, on land that is predominately used for agricultural activities. **Figure 1-1** shows the Project locality in a regional setting.

The Applicant is seeking State Significant Development (SSD) consent for the Project under Part 4, Division 4.7 of the *Environmental Planning & Assessment Act 1979* (EP&A Act). Athena engaged Environmental Resources Management Australia Pty Ltd (ERM) to prepare an Environmental Impact Statement (EIS) for the Project, as part of the SSD consent process.

The Project was determined to be a controlled action on 26 March 2023 and approval is also sought under Part 9 of *Environment Protection and Biodiversity Conservation Act 1999* (Cwlth.) (EPBC Act) Referral (EPBC Ref: 2022/09444).

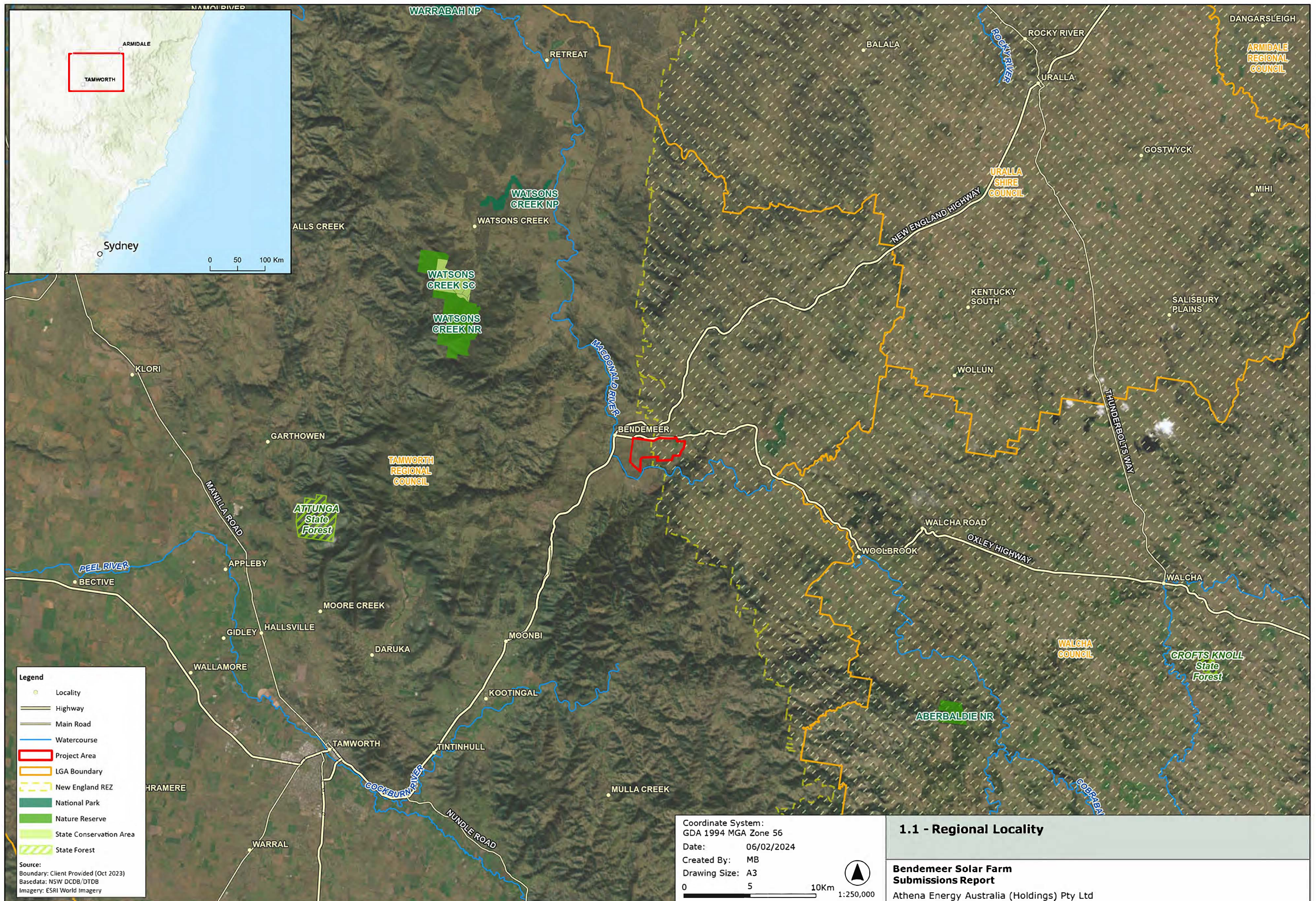
In support of the SSD application (SSD- 36651552), an EIS was prepared for the Project (ERM, 2023). The EIS was publicly exhibited between 27 July 2023 and 23 August 2023 by the (then) NSW Department of Planning and Environment (DPE; now Department of Planning, Housing and Infrastructure (DPHI)).

A total of 244 submissions relating to the Project EIS were received from government agencies, local council, organisations and members of the public during the exhibition period. The submissions are available on the DPHI Major Projects website [Bendemeer Solar Farm | Major Projects Planning Portal](#).

This Submissions Report has been prepared to respond to the matters raised in the submissions and has been prepared in accordance with the *State Significant Development Guidelines – Preparing a Submissions Report, Appendix C* to the *State Significant Development Guidelines* (DPE, 2022).

This Submissions Report provides details of actions which have been taken since the EIS was exhibited, including a summary of Project amendments and ongoing community and Government stakeholder engagement activities. The response to submissions includes actions and changes to the Project as described in the Bendemeer Solar Farm Amendment Report (Amendment Report) (ERM, 2025). This Submissions Report should be read in conjunction with the Bendemeer Solar Farm EIS, Amendment Report and supporting documentation, all available on the DPHI Major Projects [website](#).

The Minister for Planning is the consent authority for SSD, and SSD applications are assessed by DPHI. Following receipt of this Submission Report, DPHI will complete its assessment of the Project, prepare an assessment report and make a recommendation, taking into consideration the EIS, Submissions Report, Amendment Report and supporting documentation as well as submissions made during the public exhibition period. As the Project EIS received over 50 submissions that objected to the Project, the Independent Planning Commission (IPC) is declared to be the consent authority for the Project under Section 4.5(a) of the EP&A Act by the provisions of Section 2.7 (1) of the State Environmental Planning Policy (Planning Systems) 2021. Therefore, DPHI will refer the Project to the IPC following completion of its assessment report and recommendation.



1.2 PROJECT OVERVIEW

The Project is situated about 1.8 kilometres (km) east of the Bendemeer town centre, represented by the Bendemeer Hotel, and is located 46 km (by road) north-east of the Tamworth Post Office to the Project site access. The Project is located within the New England Renewable Energy Zone (REZ), in the Tamworth Regional LGA in the New England Region of NSW. The Project extends across an area of approximately 606.9 hectares (ha) (Project Area), over three freehold land parcels, on land that is predominately used for agricultural activities. The disturbance footprint, i.e., area of land will be subject to construction and operation of the Project is 369.2 ha.

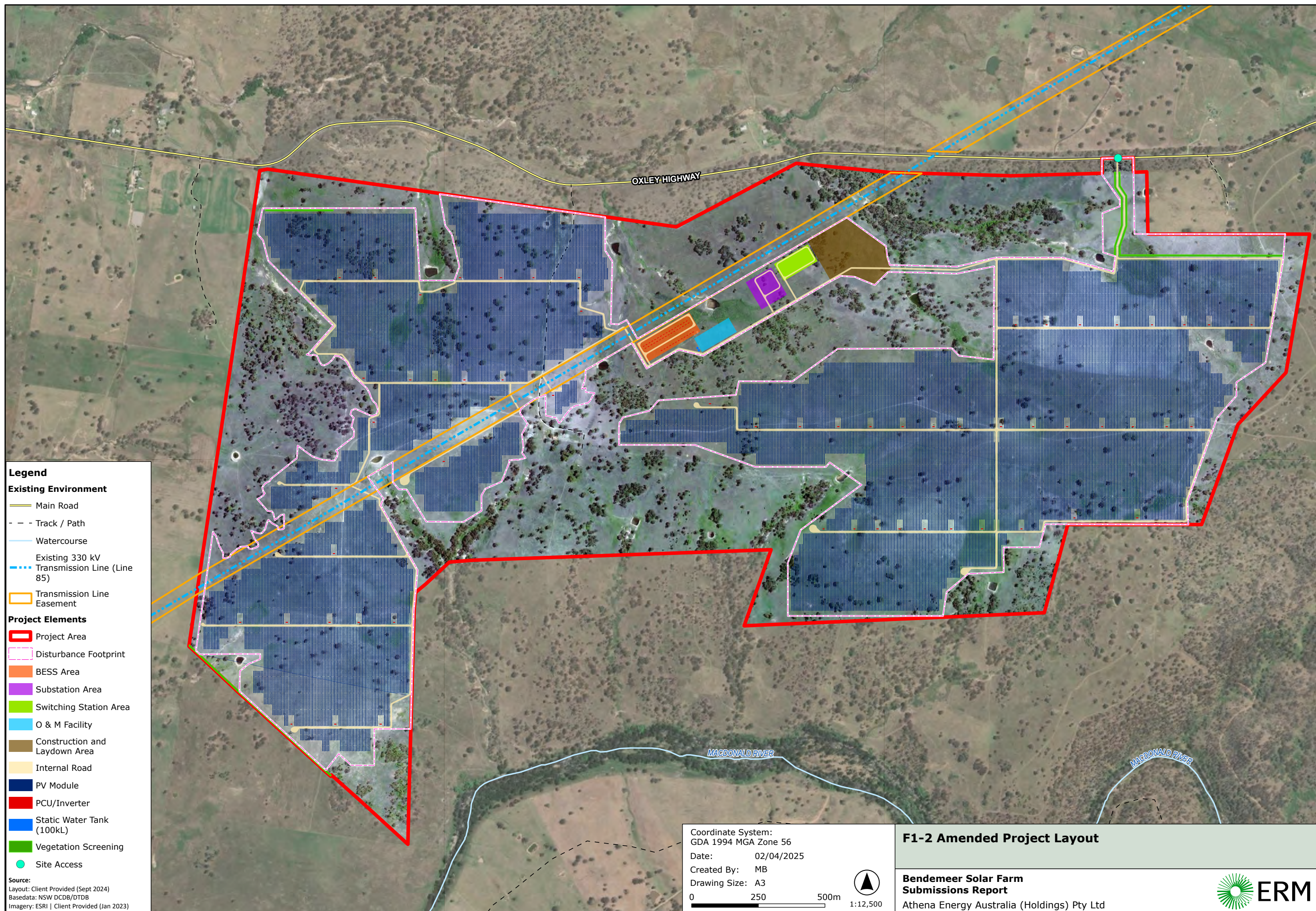
Following exhibition of the EIS, the Project layout has been revised and refined in response to:

- The submissions received;
- Further assessment of environmental, economic and social aspects;
- Constructability requirements; and
- Consideration of the outcomes of agency, landowner, and community consultations.

The amendments to the Project are summarised in **Section 1.1** and discussed in detailed in the Bendemeer Solar Farm Amendment Report (ERM, 2025).

The Project will involve the construction, operation and decommissioning of a photovoltaic (PV) solar farm, Battery Energy Storage System (BESS) and associated infrastructure. The amended Project layout is shown in **Figure 1-2**, and includes:

- Solar Arrays with a capacity of approximately 255 Megawatt (MW) Direct Current (DC) (reduced from 280 MW) and registered connection capacity of 200 MW Alternating Current (AC);
- BESS with a capacity of up to 150 MW / 300 MWh;
- Electricity infrastructure:
 - Power Conversion Units (PCU) housing up to 60 inverters;
 - One 33/330 kilovolt (kV) collector substation and associated internal structures;
 - Switching station;
 - Electrical reticulation infrastructure including underground and overhead 33 kV cables; and
 - Direct grid connection to existing 330 kV line.
- On-site permanent supporting infrastructure:
 - Site access road, entry and internal access roads; and
 - Operations and Maintenance (O&M) Facility including control room, meeting facilities, storage facilities, Supervisory Control and Data Acquisition (SCADA) facilities, workshop, parking, ablutions buildings, septic and static water supply, waste management facilities, lighting, fencing and asset protection zones.
- Off-site supporting infrastructure:
 - Tamworth waste and wastewater disposal facilities; and
 - Existing public road network.
- 24 hours a day, seven days per week operation with up to 15 Full Time Equivalent (FTE) personnel.



2. ANALYSIS OF SUBMISSIONS

This section provides an analysis of the submissions received for the Project EIS during its exhibition, with focus on groups and people, geographic extent, categorisation of issues and theme raised in the submissions.

2.1 NUMBER OF SUBMISSIONS

A total of 244 submissions relating to the Project EIS were received from government agencies, organisations and members of the public during the exhibition period. The submissions are available on the DPHI Major Projects website and are broken down as follows:

- 218 public submissions;
- 1 local council submission;
- 13 organisation submissions;
- 9 government agencies submissions;
- 1 duplicate public submission; and
- 2 submissions that referred to the Bendemeer Wind Farm project impacts only (subject to a separate SSD application) and therefore not considered further in this analysis.

Submissions excluded from the analysis include those categorised as a duplicate (SE-61418227)¹, and two submissions (SE-61244229 and SE-61587239) relating exclusively to the proposed Bendemeer Wind Farm project and hence not associated with the impacts of this Project. Therefore 241 submissions were analysed in this report that are relevant to the Project. Nineteen submissions were noted to contain references to both the Project and the Bendemeer Wind Farm. These submissions were analysed; however, the content of those submissions relating to the wind farm only was excluded.

Of the submissions that were received from the public and community organisations, a total of 110 (48%) were classified as being in support of the Project, 118 (51%) were classified as being in objection to the Project, and 3 (1%) provided comment only (refer **Figure 2-1**). One submission (SE-61371222) was submitted as a comment; however, the submission was clearly in support of the application so has been included in the breakdown above as a support submission.

¹ SE-61418227 was classified as a duplicate submission as it was from the same submitter as SE-61488469. All points were considered as a single submission (SE-61488469).

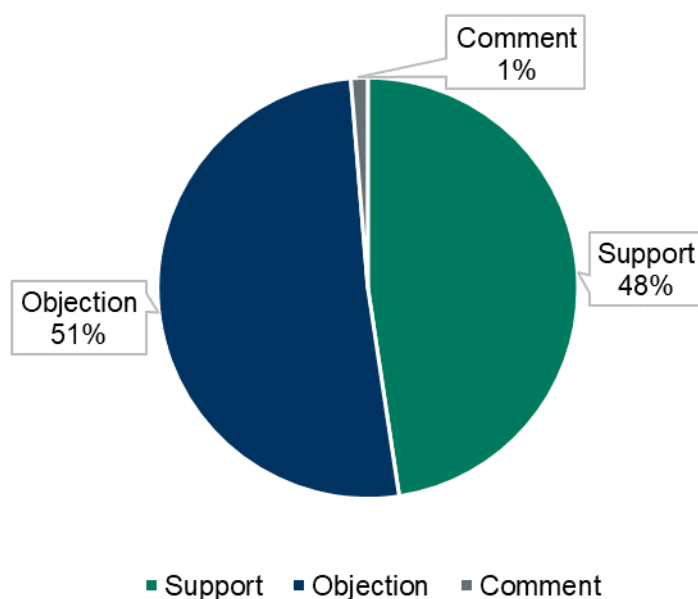


FIGURE 2-1 PUBLIC AND COMMUNITY ORGANISATION SUBMISSION ANALYSIS CATEGORISATION

All submissions received have been recorded in the Submissions Register (refer **Appendix A**). A breakdown of the submissions by type (support, object, comment) is detailed in **Table 2-1** and includes comments from local council and government agencies.

TABLE 2-1 NUMBER OF SUBMISSIONS RECEIVED

Type	Object ²	Support ³	Comment	Total
Public	114	101	3	218
Community Organisation	4	9	-	13
Local Council	-	-	1	1
Government Agency	-	-	9	9
TOTAL	118	110	13	241

Thirteen submissions were received from community organisations, including from:

- ReD4NE (Responsible Energy Development for New England);
- Salisbury Plains Renewable Energy Action Group;
- Save Our Scenery Bendemeer Action Group;
- Save Our Woodlands;
- Onward Consulting Pty Ltd;
- Tamworth Workers Village Pty Ltd;
- Andromeda Industries;
- Bendemeer Art Show;
- Geni.Energy Ltd;

² Note that three submissions (one duplicate and two omitted) have been discounted from the analysis of submissions.

³ Note that one submission was submitted as a comment, however, as the submission was in support of the application this submission has been assessed as a support submission.

- Apollo Engineering;
- Vesi Water Pty Ltd;
- Keberen Pty Ltd; and
- Get Jonesy Construction.

Submissions were received from the following government agencies and authorities:

- DPI Agriculture;
- Department of Climate Change, Energy, the Environment and Water (DCCEEW) Heritage NSW;
- DCCEEW Water;
- DPHI Crown Lands;
- Biodiversity Conservation Science Directorate (BCS)⁴;
- Transport for NSW (TfNSW);
- Fire and Rescue NSW (FRNSW);
- NSW Rural Fire Service (RFS); and
- Department of Regional NSW – Mining, Exploration and Geoscience (MEG).

One council, Tamworth Regional Council (TRC) also provided a submission.

2.2 GEOGRAPHIC ANALYSIS

The *State Significant Development Guidelines – Preparing a Submissions Report, Appendix C to the State Significant Development Guidelines (DPE, 2021)*, specify that submissions should be geographically categorised according to the level of local (<5 km from the site), regional (5-100 km from the site) and broader community (>100 km from the site) interest in the Project.

Of the 231 unique public and organisation submissions received:

- 76 (33%) were local (<5 km from the site), comprising 16 in support, 59 in objection and 1 with comment only;
- 93 (40%) were regional (5-100 km from the site), comprising 53 in support, 38 in objection and 2 with comment only; and
- 62 (27%) were categorised as broader community interest (>100 km from the site) comprising 41 in support and 21 in objection.

Figure 2-2 illustrates the overall breakdown of submissions and the geographic distribution of public submissions by distance.

⁴ BCS have recently been renamed as Conservation Programs, Heritage and Regulation Group (CPHR) as part of DCCEEW; however, for this Submissions Report references BCS as the change to CPHR occurred after their submission was received.

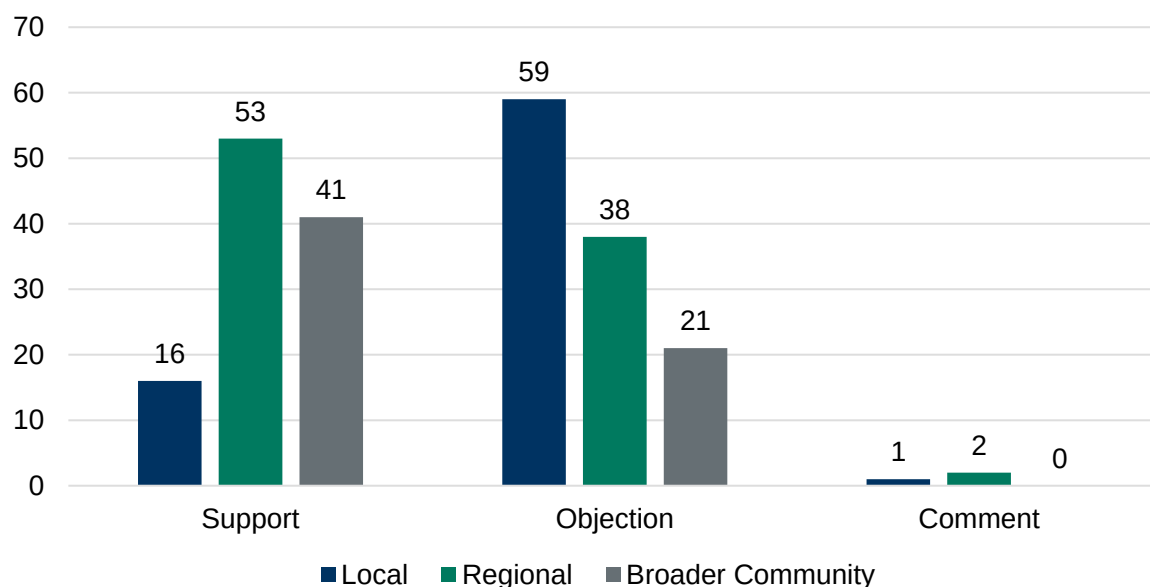


FIGURE 2-2 SUBMISSION ANALYSIS BY DISTANCE FROM PROJECT AREA

Submissions in support of the Project dominated those from the regional and broader community. Submissions in objection to the Project dominated those from the local region. Overall, 73% of the total submissions were received from LGAs that are located within 100 km of the Project (i.e., Walcha LGA, Uralla Shire LGA, Armidale Regional LGA and Tamworth Regional LGA).

2.3 SUBMISSION CATEGORISATION

Each submission received was reviewed and the key themes categorised according to the *State Significant Development Guidelines – Preparing a Submissions Report, Appendix C to the State Significant Development Guidelines (DPE, 2021)*, as summarised below in **Table 2-2**. Note that each submission provided in support or objection to the Project may have raised more than one key theme.

TABLE 2-2 CATEGORIES OF ASPECTS RAISED IN SUBMISSIONS

Category	Description
The Project	The site, project area, physical layout and design, key uses and activities, timing
Procedural matters	The level or quality of engagement, compliance with the SEARs, identification of relevant statutory requirements
Economic, environmental and social impacts	Biodiversity, noise and vibration, landscape and visual, transport and traffic, social and economic, aviation, bushfire, BESS hazards, human health, heritage, agriculture, soil and water, flooding, air quality, waste and cumulative impacts
Justification and evaluation	Consistency of project with Government plans, policies or guidelines
Issues beyond scope of project	Broader policy issues or not relevant to the Project

Once submissions were allocated according to the categories in **Table 2-2**, they were then further categorised into relevant sub-themes aligning with relevant economic, environmental and social aspects.

A breakdown of the key matters raised in submissions in support and objection to the Project is provided in **Section 2.3.1** and **Section 2.3.2** respectively.

2.3.1 COMMUNITY SUPPORT

A summary of the key matters raised in public and organisation submissions in support of the Project is provided in **Table 2-3**.

TABLE 2-3 KEY MATTERS RAISED IN PUBLIC SUBMISSIONS (SUPPORT)

Category	Description
The Project	Is well placed to allow use of existing transmission infrastructure (less disturbance) and the New England Renewable Energy Zone
	The Project works well with existing agricultural land use
	Carefully designed Project with a suitable site and to minimise impacts
Procedural matters	Applicant has undertaken extensive consultation with the Bendemeer community and considered feedback in design
	Team has adequately acknowledged and managed community concerns
	The Project is highly regulated, and the EIS outlines mitigation measures very clearly
	EIS studies have been undertaken to the best of the ability of the Applicant, with potential impacts clearly stated and mitigated
Justification and evaluation	Support the transition to renewable energy
	Local and regional growth and livelihood benefits related to income diversification, employment opportunities, economic benefits to businesses and ongoing agricultural practices
Environmental, Social & Economic	Detailed in Table 2-4

Of the 110 submissions (48% of total submissions) that were received in support of the Project, the major support themes were:

- The benefits related to economic, social and environmental impacts (refer to **Figure 2-4**), and the justification and evaluation of the Project;
- The need to transition to renewable energy sources (86 submissions, or 78% of the support submissions);
- General support for the Project's ability to operate in conjunction with existing agriculture (mixed-land use);
- The Project being sited to avoid disturbance by using existing infrastructure; and
- Positive feedback relating to the extensive and comprehensive consultation that has been conducted, and appreciation for the incorporation of community feedback into the Project design to manage community concerns.

Figure 2-3 illustrates the broad themes raised in public submissions in support of the Project.

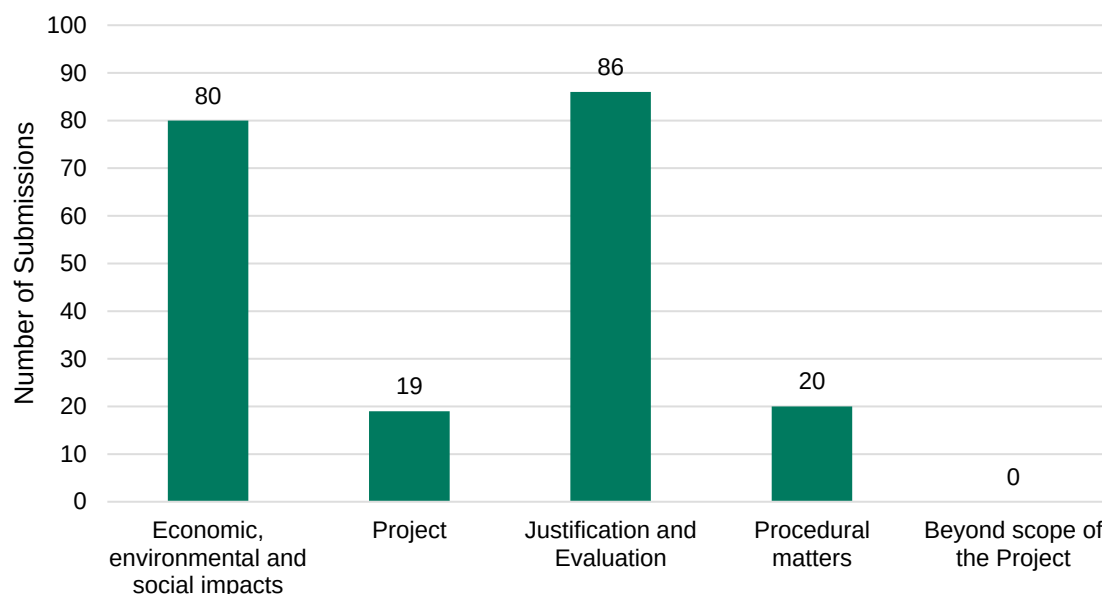


FIGURE 2-3 BROAD THEMES OF SUPPORT SUBMISSIONS

The key environmental, social, and economic issues raised in submissions of support were further broken down relevant to the potential impacts that were assessed within the EIS. Summaries of these are presented in **Table 2-4** and **Figure 2-4**.

TABLE 2-4 ECONOMIC, SOCIAL AND ENVIRONMENTAL SUBMISSIONS SUMMARY (SUPPORT)

Impact Category	Key Aspects Raised
Air Quality	No release of emissions will result in better air quality
Biodiversity	Proposed Project Site has minimised biodiversity impacts
	The Project has retained a native vegetation corridor through the Project Area
Noise	All noise impacts are within suitable guideline limits
Social and Economic	Provides opportunities to generate more economic value to regional centres
	Increased income for workers in the area
	Reduced electricity costs will reduce cost of living
	Increased diversity in local and regional economy
	Enable support of local businesses
	Increased employment opportunities in regional centres (both directly and indirectly)
	Upgrades to local infrastructure that will provide long term benefit to the community
	Increase the local and regional population and bring new services to the region
	Community Benefit Fund will allow for local improvements and support for local community groups
Soils and Agriculture	Development of new skills in the regional area
	Continued use of the land for sheep grazing will help maintain agricultural industry in region

Impact Category	Key Aspects Raised
	Diversification of income for landholder will help to maintain drought resilience and succession planning
	Increased income may allow for greater weed and pest control measures to be implemented
	Minimal reduction in agricultural productivity from the Project
	Greater shade and water will improve natural feedstock for grazing
Traffic	Vehicles will not travel through the village, meaning there will be minimal impact to residents
Visual	Significant native vegetation around the Project largely shields the panels from view
	Proposed tree planting will mitigate impacts to other landowners
	Solar panels provide additional purpose to existing facilities on site (powerlines and cleared land) and conveys sense of efficient land use
	Limited glint and glare
Water Resources, Hydrology and Flooding	Additional water resources from condensation and water run-off from panels
	Reduce pollution to waterways due to less from fossil fuels

Submissions in support of the Project generally highlighted the social and economic benefits associated with both the construction and operation of the Project, including:

- Diversification of industry leading to increased income;
- Direct and indirect job opportunities and opportunities to upskill for locals;
- Long term benefit to the community through the establishment of the community benefit fund (CBF) that will assist in upgrading local infrastructure;
- Increased support for local businesses and organisations; and
- Opportunities for population growth through the introduction of new industries into the area.

A breakdown of the total submissions for each category is included in **Figure 2-4**.

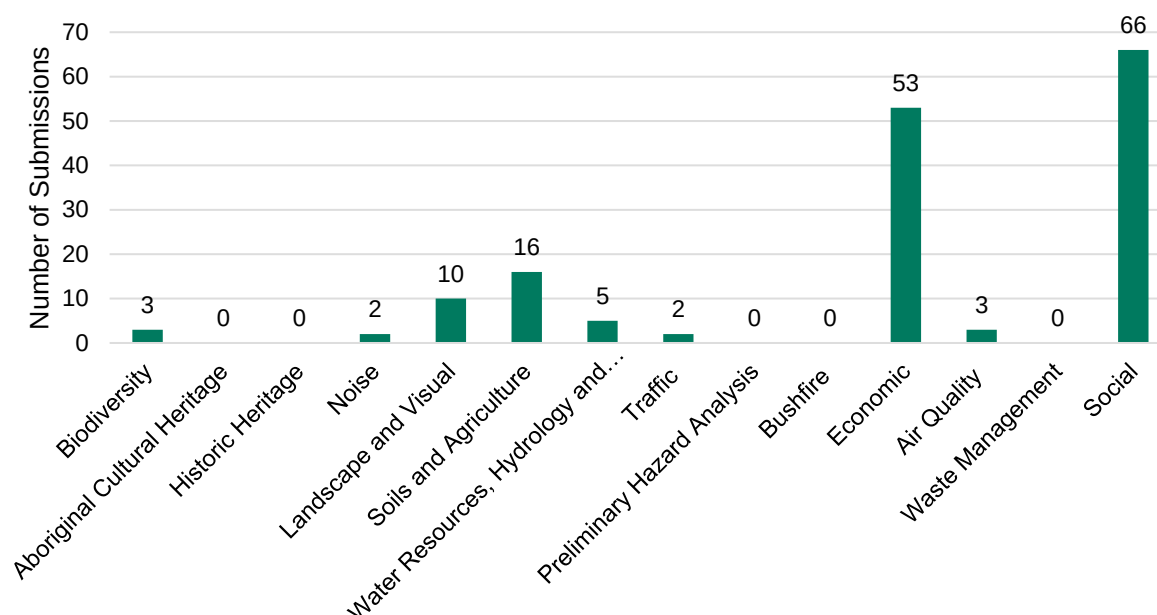


FIGURE 2-4 ENVIRONMENTAL, ECONOMIC AND SOCIAL ASPECTS IN SUPPORT OF THE PROJECT

2.3.2 COMMUNITY OBJECTIONS

A summary of the key matters raised in public and organisation submissions in objection to the Project is provided in **Table 2-5**.

TABLE 2-5 KEY MATTERS RAISED IN PUBLIC SUBMISSIONS (OBJECTIONS)

Theme	Description
Project	Located in proximity to Bendemeer village (1.8 km)
	Location of the substation and BESS should be moved further to SW portion of the Project area
	Poor placement due to high rainfall and lack of sunlight
	Land use conflict between the Project and agriculture
	Project elements are unable to be recycled and will therefore negatively impact the environment
	Lack of clarity around decommissioning
Procedural Matters	Community Benefit Fund was not adequate to mitigate impacts
	Assessments failed to assess impact from properties, only from residences
	Compensation by the Applicant is seen as means to overlook potential impacts on neighbours
	There has not been adequate consultation with stakeholders such as EnergyCo to ensure what is promised occurs
	Insufficient testing to the land has occurred to enable successful rehabilitation
	EIS assessments were rushed and insufficient to adequately characterise impacts
	Insufficient community consultation and conflicting information provided to neighbours

Theme	Description
	Incorrect information provided in the EIS regarding climate
Justification and Evaluation	Renewable energy is not a sustainable solution as it does not provide baseload power
	Project location will impact the liveability of the residents of Bendemeer and does not align with the Large-Scale Solar Energy Guidelines
	Alternatives such as nuclear would be better suited to the development of alternative energy
	Consideration has not been provided to the supply chain issues (i.e., modern slavery) or the carbon footprint of solar panel production
Out of Scope	Impacts associated with the potential Bendemeer Wind Farm*
	Foreign ownership of company
	Inadequacy of the Biodiversity Offset System
	Dissatisfaction of being included within the New England REZ

*not addressed in this report.

A total of 118 submissions (51% of total submissions) were raised in objection to the Project. Most of these opposed environmental and social impacts, asserting the Project would devalue the surrounding properties, result in negative biodiversity impacts to the Macdonald River, be visually unappealing, and result in impacts to the agricultural industry and productivity of the land.

The majority (59) of submissions in objection were from the local area (within 5 km from the Project Area), while 38 were received from the regional area (5-100 km from the Project Area), and 21 from the broader community. The main themes of the objections raised are shown in **Figure 2-** and related to:

- The proximity of the Project to the Bendemeer village (1.8 km to the east);
- Concerns around decommissioning of solar panels and resulting contamination; and
- Compensation being insufficient to mitigate the impacts.

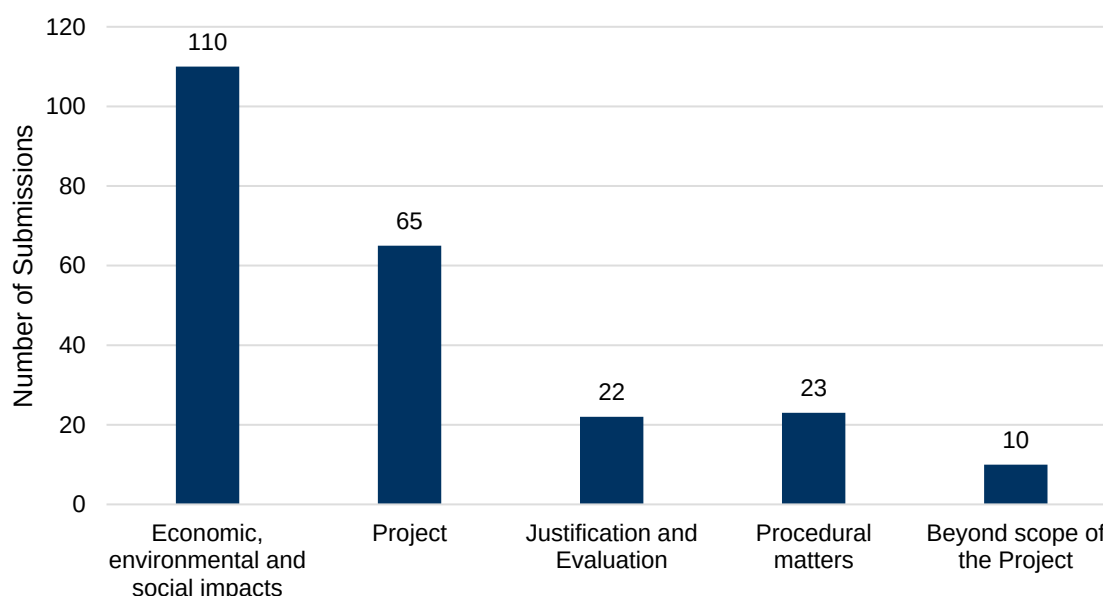


FIGURE 2-5 BROAD THEMES OF OBJECTION SUBMISSIONS

Key themes of objection to the Project relating to social, economic and environmental aspects are presented in **Table 2-6**.

TABLE 2-6 ECONOMIC, SOCIAL AND ENVIRONMENTAL SUBMISSIONS SUMMARY (OBJECTIONS)

Category	Description
Aboriginal Heritage	Study is insufficient and was rushed
Biodiversity	Loss of animal habitat that will be difficult to regrow and replace
	High impact to the wildlife that depend upon the Macdonald River
	Clearing of trees will lead to higher levels of erosion and dust
Noise	Noise at neighbouring properties is unacceptable and may impact workers and recreational activities
	Substantial noise impacts from construction and traffic
Social and Economic	Property devaluation concerns for the area
	Increased cost of living due to supply limits in regional area (and cumulative impact from NE REZ)
	Impacts to resident mental health, stress and wellbeing
	Community division
	Loss of tourism to the town
	Significant increase in insurance premiums from the Project
Traffic	Safety concerns for local road users during the construction phase
	Increased construction traffic could impact emergency services and cause congestion
	Impacts to roads, with the road condition unable to cope with heavy vehicle traffic
	Access concerns to neighbouring properties during the construction phase
	Degradation to local roads from increased heavy vehicles usage
Visual	Glare and reflection could be a safety hazard to pilots and motorists
	Visual impact assessment from neighbouring residences is not representative of whole property
	Visually unappealing to wider rural landscape views
	Lighting concerns from the BESS and substation
Soil and Agriculture	Will cause the land to be more erodible due to loss of topsoil and vegetation
	Decrease in agricultural productivity due to mixed use

Category	Description
	Agricultural land is finite and therefore should be preserved for future generations
	Constant noise and visual impact will be disruptive to livestock and farmers in the areas
Water Resources, Hydrology and Flooding	Pollution from sedimentation and erosion of Project area
	Water resources could be polluted from panel cleaning and use
	Capturing run-off will alter the current river system and water supply
	Potential for contaminants to leach into the waterways
	Macdonald River is the town water supply, with the drinking water of residents likely to be impacted
Preliminary Hazard Analysis	Exacerbates bushfire risk
Bushfire	Placed on bushfire prone land, with unmaintained grass coverage under the panels an increased fire risk
Air Quality	Heat island affect will impact weather systems and the water cycle
Health	Impacts to neighbours and hosts from impacts such as electromagnetic fields
	Long term emotional impact not considered
	Unknown health risks associated with solar panel use
Cumulative Impacts	Traffic and resourcing concerns from cumulative impacts of the NE REZ not considered
	Small towns unable to cope with all of the NE REZ developments
Waste	Insufficient detail about waste management during operation and decommissioning

Submissions in objection to the Project generally highlighted a wide range of issues associated with the operation and construction of the Project. The objections that were raised through submissions are addressed in **Section 4.2**.

A breakdown of the total submissions for each sub-category is illustrated in **Figure 2-6**.

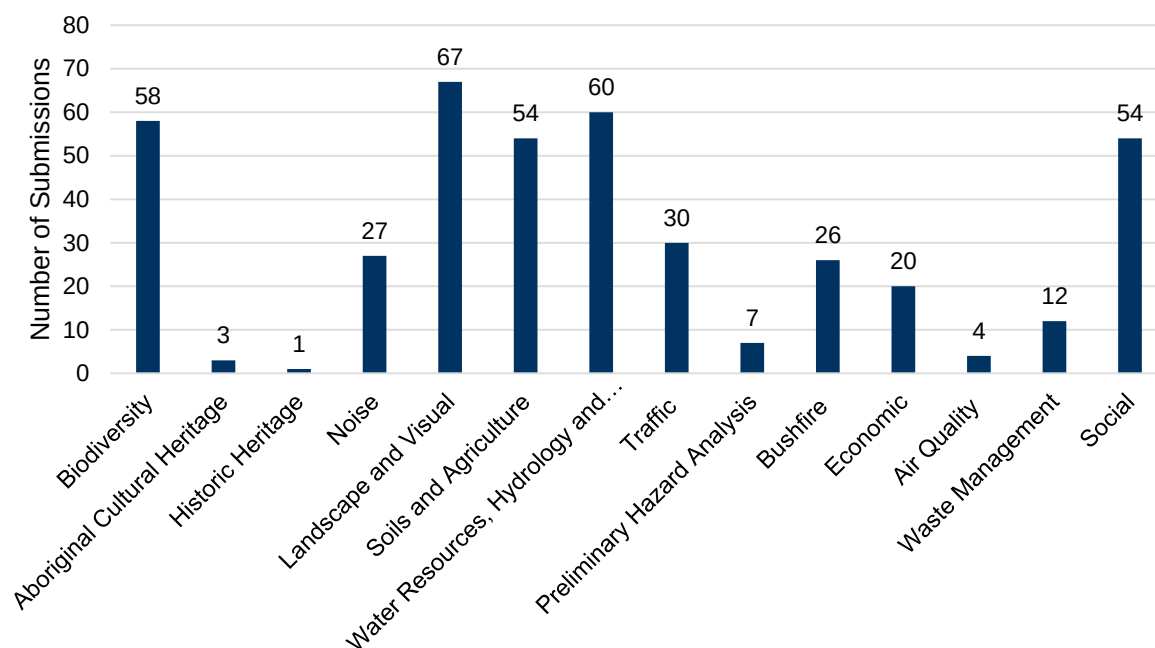


FIGURE 2-6 ECONOMIC, SOCIAL AND ENVIRONMENTAL ASPECTS OF OBJECT SUBMISSIONS

2.3.3 COMMUNITY COMMENTS

Three⁵ community members, one local council and nine government agencies submitted comment submissions regarding the Project. The council and government agencies submissions are analysed in **Section 4.1**, and comments and objections from the community are addressed in **Section 4.2**.

⁵ Note explanation in Section 2.1 regarding re-categorisation of a comment submission to a support submission.

3. ACTIONS TAKEN SINCE EXHIBITION

This section provides a summary of the actions undertaken to address the issues raised in submissions since the exhibition of the Project EIS.

3.1 ENGAGEMENT

3.1.1 REGULATOR ENGAGEMENT

The Applicant has consulted with several government agencies and TRC to clarify issues raised in submissions. Although none of the government agencies and/ or local council who provided a submission have objected to the Project, several have sought additional information or have recommended specific conditioning if approval is granted.

Table 3-1 summarises further engagement undertaken with government agencies and councils.

TABLE 3-1 REGULATOR ENGAGEMENT OVERVIEW

Engagement Activity	Description
DPE/DPHI	
17 October 2023, 7 December 2023, 17 January 2024, 7, 14, 28 February 2024 21 March 2024 Videoconference, presentation	- To discuss DPHI requirements and expectations regarding submissions from several agencies (TfNSW, RFS, BCS and TRC), outline proposed refinements to the Project in response to submissions received, the need for an Amendment Report and Project submission timeline. - Matters raised include construction workforce transportation to the Project using shuttle bus and required Traffic Impact Assessment (TIA) amendment, RFS requirement of water tank sizing, Project layout refinement to avoid areas of biodiversity constraints, increased erosion and reduce visual impacts on receivers. - To discuss external review of the Social Impact Assessment (SIA) prepared for the Project EIS and present proposed responses to each matter raised in the review. - Clarification was provided on further assessment required for the SIA, including the potential social impacts of the Project, management and mitigation measures, Project workforce, and social cumulative impacts. - To discuss finalisation of the Submissions Report and Amendment Report. - To present and discuss how amended Project has further avoided and minimised impacts. - To discuss potential impact and proposed mitigation measures for clearing of Box Gum Woodland CEEC, including consideration of further disturbance footprint reductions.
22 November 2023 Videoconference, presentation	- To provide an overview of the key amendments to the Project since EIS exhibition, timeline of Amendment Report submission and required updates of environmental, economic and social assessments for the amended Project layout. - Aspects discussed include significant reduction of the disturbance footprint associated with solar array area reduction and reallocation of O&M facility, construction compound and laydown area to south of existing transmission line. - The amendments to the Project layout would generally reduce the impacts of the Project, including visual amenity, biodiversity and agriculture. Other aspects discussed include traffic analysis associated with the realignment of internal roads providing site access.

Engagement Activity	Description
BCS (now CPHR)	
23 October 2023 Videoconference, presentation	- To discuss the BCS submission for the Project, the proposed response and Updated Biodiversity Development Assessment Report (BDAR) methodology to clarify and address issues raised in the BCS submissions. - BCS confirmed the proposed methodology, and approach will be accepted as consistent with the transitional arrangements when the reviewing the Updated BDAR.
02 August 2024 31 October 2024 30 January 2025 Videoconference, presentation	- To discuss the Applicants approach to biodiversity management of the Project, including options for conservation of Box Gum Woodland CEEC such as a Biodiversity Stewardship Site - Provide update as to the Applicants redesign to further reduce impact to Box Gum Woodland CEEC - Meetings also attended by DPHI
TfNSW	
13 November 2023 Videoconference, presentation	- To discuss TfNSW submission for the Project, the proposed response to clarify and address raised issues in the Updated TIA, and the Project submission timeline. - Matters raised include OSOM requirements, shuttle bus and carpooling for construction workforce transportation, growth rate along Oxley Highway and SIDRA modelling, emergency site access, intersection treatments and swept path assessment.
4 December 2023 Videoconference, presentation	- To discuss matters raised in TfNSW submission for the Project including the provision of shuttle bus for construction workforce and the requirement of turn treatments at the intersection of Oxley highway and site access. - TfNSW agreed with the approach to be undertaken by the Applicant regarding shuttle bus compliance and turn treatment in the Updated TIA.
5-22 December 2023 Email	- To present the design of the intersection of the site access and Oxley Highway, with an updated swept path assessment which shows the simultaneous movement in each direction. The design allows B-Doubles to access the site from either direction in the unlikely event a truck accessed the site from the east. - TfNSW are supportive of the provision of no BAL at the site access given there are not expected to be any left turn vehicles during construction. Further, the designs do not identify the scope for the high risk OSOM design vehicle.
Tamworth Regional Council	
6 November and 5 December 2023 Email	- To request endorsement of proposed pickup locations of the Project's construction workforce within Tamworth LGA for shuttle bus and carpooling. - TRC supports the use of Solander Drive carpark (Oxley Highway, West Tamworth NSW 2340) as a designated pickup location for shuttle bus and carpooling for the Project's construction workforce. The second proposed location Carter Street/Plain Street car park is not preferred by TRC due to the relatively high use from about 3.30 pm each afternoon and Saturday mornings. TRC also offered a third option which is the less formal car park directly underneath the viaduct, between the old Netball Courts and sports fields. - TRC requested further consultation prior to construction work commencing, to confirm if the proposed pickup locations are still appropriate or whether new alternative carparks are to be considered.

Engagement Activity	Description
13 February 2024 Email	- Acknowledging Council's comments raised in the VPA reply letter dated 9 June 2023 and the 19 September 2023 submission to DPPI, the Applicant prepared revised proposed VPA Terms of Reference aligning with the Applicant's understanding of TRC's expectations and policy with further consideration given towards the Project scale and relative impacts. A revised VPA proposal was presented to Council on 13 February 2024. - A summary of the Applicant's responses to TRCs EIS submission was provided in a formal letter (issued via email) to key Council staff in preparation for a subsequent meeting.
14 February 2024 Meeting	- Meeting to discuss the Applicant's proposed VPA. TRC outlined its expectations for VPAs associated with renewable energy projects and made reference to Council's recently adopted VPA policy. - The Applicant outlined the changes to the proposed VPA aligned with Council's recently policy with some adjustments based on the specifics of the project and the expectations of the community with regards to a Community Benefit Fund. - Council was pleased with the proposed revised structure, particularly the reaffirmed commitments to establish a philanthropic committee to manage the Community Benefit Fund, as opposed to Council. TRC stated that it is policy to report proposed VPAs to Council prior to formal agreement.
20 February 2024 Email	TRC provided a copy of Council's recently adopted <i>Tamworth Regional Council Voluntary Planning Agreement Policy for Renewable Energy Projects 2023</i> for further consideration by the Applicant
23 February 2024 Email	The Applicant presented revised VPA Terms of Reference via formal letter to TRC.

Armidale Regional Council

6 and 23 November 2023 Email	- To request endorsement of proposed pickup locations within Armidale LGA for the purposes Project's construction workforce transportation using shuttle buses and carpooling. - Armidale Regional Council recognises the potential cumulative impacts of other renewable energy projects occurring in the region and understands the importance of the provision of alternative transportation option for the construction workforce. As such, Armidale Regional Council has no objections to the use of the Armidale Showground (Dumaresq St, Armidale NSW 2350) as a designated pickup location for shuttle bus and carpooling for the Project's construction workforce. - Armidale Regional Council also advised that the carpark next to the Monckton Aquatic Centre may also be used if the showgrounds has an event and it is not being used for patrons and events.
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Uralla Shire Council

6 November and 6 December 2023 Email	- To request endorsement of proposed pickup location within Uralla LGA for the purposes Project's construction workforce transportation using shuttle buses and carpooling. - Uralla Shire Council did not support the proposed pickup location off Hill Street, however offered to identify an alternative more suitable location. - Metis is currently in discussions with Uralla Shire Council regarding an alternative pickup location.
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3.1.2 COMMUNITY AND STAKEHOLDER ENGAGEMENT

The Applicant has continued to engage with and seek feedback from the community and other stakeholders as detailed in **Table 3-2** below.

TABLE 3-2 COMMUNITY AND STAKEHOLDER ENGAGEMENT OVERVIEW

Engagement Activity	Description
Landholder	
August 2023 – February 2024 Email, Phone and in Person	Weekly ongoing consultation held with the host landholder outlining key themes of the submissions received, project status and progress on Submissions report. Identification of proposed project amendments in response to submissions and ongoing project refinement. Landholder confirmed acceptance of proposed project change, noting reduced environmental and social impacts of the revised project layout and alignment with landholders continued farming plans.
Nearby Communities, Community Groups and Business Groups	
September 2023 to January 2024 Newsletter	- Project monthly newsletters are exhibited on the Project's website and distributed via electronic direct mail. Since lodgement of the EIS, the newsletters provided updated on status of the project, opening and closure of the public exhibition, notification of the preparation of the response to submissions report and proposed project amendments. - Engagement with neighbours requested.
September 2023 to April 2025	- Since April 2023, a permanent Community Hub was established in Bendemeer Village to provide a centralised location for the community to engage with the Project team. - Community attendance at the community hub significantly reduced since closure of the EIS exhibition period. - The Community Hub continues at the Bendemeer CWA Hall on a monthly basis.
February 2024	Due to the reduced attendance observed in late 2023, the community hub has been reduced to monthly on an ongoing basis with the first for 2024 held on 2 February.
Transgrid	
September to January 2024 Monthly meetings	- Project development status updates were communicated to Transgrid in monthly project meetings. - No specific feedback or comments have been raised by Transgrid to date in relation to the planning and environmental aspects of the project. Transgrid have requested to continue to be updated on project progress.
Aboriginal Stakeholders	
9 November 2023 Email, letter	A Project update letter was distributed to all RAPs advising that the ACHAR and Project EIS have been on public exhibition and comments were received from Heritage NSW that needed to be addressed in the revised ACHAR. This included the need to survey the external road work area across the site access.
20 November 2023 Email, letter	A Project update letter was sent to all RAPs advising that the survey of the external road work area had been completed, and no Aboriginal sites were recorded.
8 February 2024 Email, letter	A Project update letter was sent to all RAPs advising that an additional 0.4 ha of land has been included in the Project Area and amendments to the disturbance footprint. Both areas were assessed during survey and no Aboriginal sites were present in these areas.
24 March 2025 Email, letter	A Project update letter was sent to all RAPs advising of a reduction in disturbance footprint to retain additional vegetation

3.2 PROJECT AMENDMENTS

The Applicant has made amendments to the Project since the EIS was exhibited, including refinement of the Disturbance Footprint. These amendments are associated with changes to the size and location of the solar array, BESS, substation, switchyard, O&M compound, internal roads, construction compound and laydown areas.

The amended Project layout provides the following environmental and social benefits, discussed in detail in Section 1.3 of the Amendment Report:

- Reduced the impacts to biodiversity values (refer Appendix E of the Amendment Report):
 - Reduction in total Project layout area by 46% from 680 ha to 369.2 ha. The current 369.2 ha Disturbance Footprint is a further 23% reduction from the 476.6 ha assessed at EIS exhibition (additional avoidance of 107.4 ha);
 - Reduction of impacts to native vegetation by 64% from 154.5 ha to 55.3 ha, including;
 - Reduction in area of impact to EPBC Act listed Box Gum Woodland TEC by 76% from 97.4 ha to 23.8 ha. The current 23.8 ha impact to EPBC Act listed Box Gum Woodland TEC is a 61% reduction from the 60.3 ha assessed at EIS exhibition (additional avoidance of 36.5 ha);
 - Reduction in area of impact to BC Act listed Box Gum Woodland TEC by 64% from 154.5 ha to 55.3 ha. The current 55.3 ha impact to BC Act listed Box Gum Woodland TEC is a 61% reduction from the 103.8 ha assessed at EIS exhibition (additional avoidance of 36.5 ha);
 - Eliminated potential presence of threatened species and habitats
 - Tusked Frog: additional aural-visual frog surveys undertaken during Spring in 2023 for the Amendment Report have verified that quality and condition of farm dams were of low quality and generally unsuitable habitat justifying lack of survey effort; and
 - Eastern Pygmy-possum: detailed review of habitat and vagrancy status of the species within the bioregion determined its exclusion from the candidate species list for the Project Area.
- Implementation of voluntary conservation measures to mitigate impacts to Box Gum Woodland TEC, through the dedication of areas of retained vegetation as a Voluntary Biodiversity Stewardship Site. A Management Plan will be prepared for these areas to provide for the assisted regeneration 74.0 ha of Box Gum Woodland, and 27.7 ha of active restoration of non-woodland areas. Through these measures there will be a net benefit to Box Gum Woodland, providing for management under a voluntary Biodiversity Stewardship Site with a 1:1.8 ratio of impacted to improved/enhanced areas. These voluntary conservation measures are in addition to the offset obligations to be addressed through the NSW Biodiversity Offset scheme (BOS), and other mitigation measures proposed to minimise impacts to biodiversity values.

- Visual impact on sensitive receivers has been further reduced as follows (refer Appendix I of the Amendment Report):
 - Retention and protection of existing screen vegetation throughout the Project Area was allowed through photovoltaic (PV) modules reduction. Existing vegetation will ensure long-term screening of Project from receivers to the north, west and the surrounding area to the Project;
 - Solar panel height and PV modules reduction will further reduce the potential views from a small portion of the Oxley Highway to the north of the Project Area and areas to the west, southwest and north of Bendemeer village;
 - Following solar array refinements, the Project Area has been extended in the southwest portion to allow for planting of screening vegetation, which will fragment views of the Project from the southwest; and
 - Minor operational constraints on PV module tracking algorithms have been considered to avoid glint and glare impacts, albeit during rare scenarios.
- Additional noise mitigation measures have been included to the amended Project layout to allow for noise compliance with the 2017 'Noise Policy for Industry' (NPI; EPA, 2017) Project Trigger Noise Levels (PTNLs) at all sensitive receivers, except for an associated dwelling (ID 29), where a 2 dB NPI PTNL exceedance is predicted during operations only and under noise-enhancing meteorological conditions (refer Appendix H of the Amendment Report);
- Risk of fire propagation has decreased due to commitment to adopt LiFePO₄ (Lithium Iron Phosphate - LFP) BESS technology commitment over Nickel-Manganese-Cobalt (NMC) technology. Whilst both technologies are deployed in large-scale BESS, LFP has a lower peak temperature in a thermal runaway scenario compared to NMC battery technology (refer Appendix M of the Amendment Report);
 - LFP commitment has also enabled the BESS area to be reduced from 3.2 ha to 1.9 ha with increased units from 120 to 264 and increased inverters from 40 to 44, and smaller spacing requirements upon commitment to achieve the equivalent capacity of that assessed in the EIS.
- The following was included in the amendments to ensure the Project does not present any increased risk of widespread fire across the landscape (refer Appendix N of the Amendment Report):
 - Static water tank has doubled in quantity and volume, from 1 x 100 kL to 2 x 100 kL, to exceed NSW Rural Fire Service (RFS) requirements and to fulfill short term storage volumes anticipated for O&M activities; and
 - The Project Area has been extended in the southwest portion following solar array refinements, to allow for the required minimum of 10 m APZ surrounding clusters of PV modules;
- Additional design work has allowed for refinement of Project elements for more efficient construction and operation, including BESS design and operational requirements and compliance with National Electricity Rules, without increasing impacts from noise or visual amenity (refer Table 1-1 of the Amendment Report).

The amended Project addresses the matters raised in submissions for the exhibited Project EIS, as well as outcomes of ongoing engagement with the community, landowners, government agencies, local council, and other stakeholders (refer **Section 3.1**).

Further, the mitigation measures proposed for the amended Project have been updated to ensure all remaining potential impacts of the Project are appropriately managed and mitigated throughout the life of the Project. These changes increase the rigour of mitigation strategies and improve the viability of the Project. The updated mitigation measures are summarised in Appendix B of the Amendment Report.

Table 3-3 provides a comparison between the Project as presented in the EIS and the amended Project. An updated Project description incorporating these amendments is included in Appendix A of the Amendment Report.

The Project layout as presented in the EIS is shown in **Figure 3-1** and the amended Project layout is shown in **Figure 1-2**.

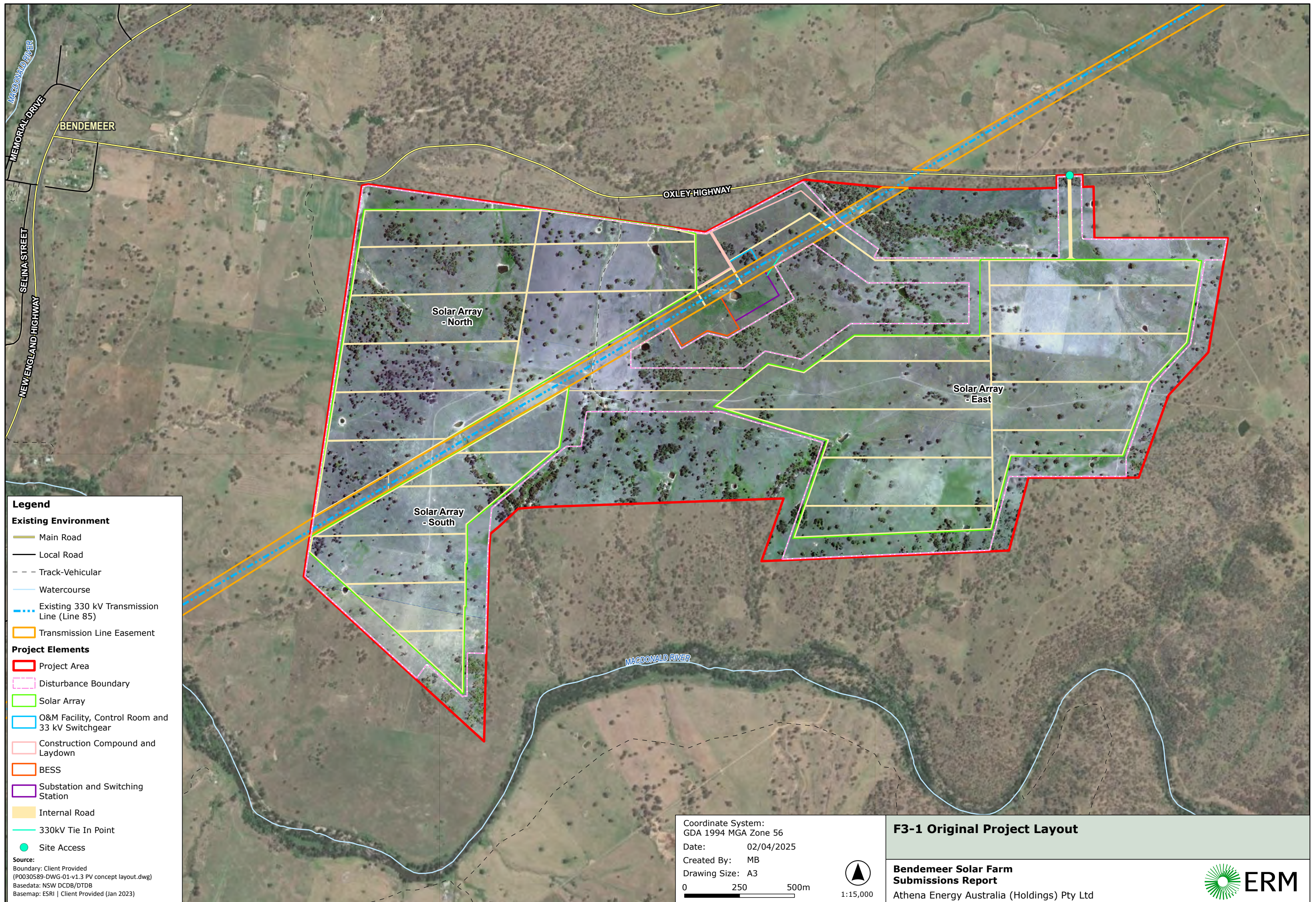
TABLE 3-3 AMENDED PROJECT SUMMARY

Project Elements	EIS (original) Project	Amended Project	Difference between EIS and Amended Project
Project Area	606.4 ha	606.9 ha	Negligible (0.08% increase)
Disturbance Footprint	476.6 ha	369.2 ha	Reduced by 107.4 ha (23%)
Solar Arrays	280 MW DC 430,000 PV modules 350.8 ha 4.2 m panel height	255 MW DC 354,330 PV modules 301.0 ha 2.66 m panel height	- DC Capacity reduced by 25 MW (9%) - PV modules reduced by 75,670 modules (18%) - Area reduced by 49.8 ha (14%) - Panel height reduced by 1.54 m
BESS	150 MW/ 300 MWh 3.2 ha 120 BESS units - LFP or NMC battery chemistry - Lot 2 DP 1211502 4 m high noise walls in the BESS Layout	150 MW/ 300 MWh 1.9 ha 264 BESS units - LFP battery chemistry - Lot 2 DP 1211502 4 m high noise walls in the BESS Layout	- No change in capacity - Area reduced by 1.3 ha (41%) - BESS make and model refined with individual BESS units of a smaller MWh capacity selected for the amended project. Due to the smaller capacity of the BESS, the number of BESS units increased by 144 (120%) to give an equivalent capacity to the EIS (original) project - Confirmed LFP battery chemistry - No change in location - No change in noise walls mitigation measure
Solar PV Power Conversion Units (PCU)	60 PCUs housing up to 60 inverters (within main solar area) - Lots 1, 2 and 3 of DP 1211502 3.5 m high noise walls for 14 inverters within solar array area	60 PCUs housing up to 60 inverters (within main solar area) - Lots 1, 2 and 3 of DP 1211502 3.5 m high noise walls for 28 inverters within solar array area - Noise attenuation kits for all 60 inverters within solar array area	- No change in number of PCUs or inverters (within main solar area) - Construction of noise walls for 14 additional inverters - Addition of noise attenuation kits to all inverters

Project Elements	EIS (original) Project	Amended Project	Difference between EIS and Amended Project
Inverters	40 inverters within BESS with noise attenuation kits	44 inverters within BESS with noise attenuation kits	Inverters increased by 4 units (10%) due to refinement in BESS and inverter proposed makes and models and to achieve National Electricity Rule compliance at the proposed 150 MW capacity.
Substation and Switching station	200 MW AC registered capacity - One 33/330 kV collector substation and associated structures 330 kV switching station 2.9 ha	200 MW AC registered capacity - One 33/330 kV collector substation and associated structures 330 kV switching station 2.37 ha 6 m high noise walls around the substation transformers	- No change in AC registered capacity - Area reduced by 0.53 ha (18%) and relocated 25 m further east - Addition of 6 m high noise walls around the substation transformers
Electrical Reticulation Infrastructure	- Internal underground high-voltage (HV) cables between solar arrays, BESS and transformers and overhead 330 kV conductors - Approximately 100 m distance between the switching station and existing 330 kV line - Direct grid connection to existing 330 kV line	- Internal underground HV cables between solar arrays, BESS and transformers and overhead 330 kV conductors - Approximately 48 m distance between the switching station and existing 330 kV line - Direct grid connection to existing 330 kV line	No change
On-site Permanent Supporting Infrastructure	Site access road, entry and internal roads		
	- APZ of minimum 10 m (PV modules), 17 m (BESS and Substation) and 12 m (associated infrastructure) - Internal roads 29.7 ha - Perimeter and internal roads up to 6m wide, aligned on APZs and/or existing farm or other access tracks, where possible - Site access via B56 Oxley Highway	- APZ of minimum 10 m (PV modules), 12-31 m (BESS, Substation and associated infrastructure) - Internal roads 13.48 ha - Perimeter and internal roads up to 6m wide, aligned on APZs and/or existing farm or other access tracks, where possible - Site access via B56 Oxley Highway, with internal roads realigned to avoid existing vegetation	- No change in APZ minimum for PV modules - Allowance for a minimum 12-31 m APZ width for BESS, Substation and associated infrastructure based on surrounding vegetation categorisation, including slight disturbance footprint adjustment to accommodate minimum 31 m APZ adjacent to some areas of the BESS - Internal roads reduced by 16.22 ha (55%) - No change in maximum road width - Minor (~10 m) adjustment of site access road location

Project Elements	EIS (original) Project	Amended Project	Difference between EIS and Amended Project
	Operations and Maintenance (O&M) Facility		
	- Located within the construction compound and laydown area, to the north of the substation and BESS compound 0.65 ha 12 m APZ 100 kL static water tank	- Located within the substation and BESS compound 0.91 ha 12-31 m APZ 2 x 100kL static water tanks	- Relocated south of existing transmission line - Area increased by 0.26 ha (40%) - Adjustment of APZ width based on vegetation adjacent to the new location - Addition of a static water tank, with total volume increased by 100 kL (100%)
Construction			
Construction Duration	Approximately 18 months	Approximately 18 months	No change in duration
Construction Workforce	Peak workforce of approximately 307 Full Time Equivalent (FTE) (some additional contractor personnel) and average annual workforce of 260 FTE for the peak 12-month of construction of the Project	Peak workforce of approximately 307 FTE (some additional contractor personnel) and average annual workforce of 250 FTE for the peak 12-month of construction of the Project	10 FTE reduction for peak 12-month average annual workforce (4%)
On-site Temporary Infrastructure	- Construction compound and laydown area located north of existing transmission line 11.6 ha	- Construction compound and laydown area located to south of existing transmission line 4.8 ha	- Relocated south of existing transmission line - Area reduced by 6.8 ha (59%)
Services and Utilities	Adjustment, protection or relocation of existing utilities	Adjustment, protection or relocation of existing utilities	No change
Ancillary Activities	Import of external gravel, aggregate and sand to site for on-site construction use	Import of external gravel, aggregate and sand to site for on-site construction use	No change

Project Elements	EIS (original) Project	Amended Project	Difference between EIS and Amended Project
Traffic and Transport Route	- Main equipment deliveries via Port of Newcastle or Port of Brisbane 62 heavy vehicles and 48 light vehicles movements per day during peak construction - Associated external road upgrades (also used for operational maintenance or decommissioning activities)	- Main equipment deliveries via Port of Newcastle or Port of Brisbane or Port of Melbourne 94 heavy vehicles and 76 light vehicles movements per day during peak construction with an additional 36 shuttle bus movements - Associated external road upgrades (also used for operational maintenance or decommissioning activities)	- Port of Melbourne may also be used for deliveries of Project equipment - During peak construction increase in daily heavy vehicle movements by 32 (52%) and light vehicles by 28 (58%) - No upgrades to external roads required
Operations			
Duration	- Development Consent in perpetuity - Infrastructure life minimum of 30 years	- Development Consent in perpetuity - Infrastructure life minimum of 30 years	No change
Hours of Operation	24 hours a day, seven days a week	24 hours a day, seven days a week	No change
Operational Workforce	Approximately 15 FTE	Approximately 15 FTE	No change



Legend

Existing Environment

- Main Road
- Local Road
- Track-Vehicular
- Watercourse
- Existing 330 kV Transmission Line (Line 85)
- Transmission Line Easement

Project Elements

- Project Area
- Disturbance Boundary
- Solar Array
- O&M Facility, Control Room and 33 kV Switchgear
- Construction Compound and Laydown
- BESS
- Substation and Switching Station
- Internal Road
- 330kV Tie In Point
- Site Access

Source:
Boundary: Client Provided
(P0030589-DWG-01-v1.3 PV concept layout.dwg)
Basedata: NSW DCDB/DTDB
Basemap: ESRI | Client Provided (Jan 2023)

Coordinate System:
GDA 1994 MGA Zone 56
Date: 02/04/2025
Created By: MB
Drawing Size: A3
0 250 500m
1:15,000

F3-1 Original Project Layout

**Bendemeer Solar Farm
Submissions Report**

Athena Energy Australia (Holdings) Pty Ltd



3.3 FURTHER ASSESSMENT OF THE PROJECT

Further detailed technical assessments have been undertaken to address the matters raised in submissions or to undertake additional due diligence on the site or inform the Amendment Report (ERM, 2025). These assessments have been prepared by a suite of specialists consisting of ERM's in-house technical experts and sub-consultants as summarised in **Table 3-4**. Where these assessments are named specifically by the specialists they are referred to as 'Amended' / 'Revised' / 'Addendum'; all other updated assessments use the generic term 'Updated'.

Sections 3, 4 and 5 provide further detail of the assessments which have been undertaken since exhibition of the EIS, and how these assessments have been informed by consultation with the regulators, local council, the community and stakeholders.

TABLE 3-4 ASSESSMENT OVERVIEW

Assessment	Author	Overview	Appendix Ref.
Updated Soil and Agricultural Impact Assessment (SAIA)	Minesoils	The Updated SAIA addresses submissions from the public and the Department of Primary Industries (DPI) Agriculture. It further evaluates the impact on productivity of agricultural land in the Tamworth Regional LGA and wider region as a result of the Amended Project layout. Of relevance to the Updated SAIA are the refinements to the Disturbance Footprint, Project Area and Project elements, such as BESS, substation, switching station, O&M and internal roads.	Appendix J of the Amendment Report
Revised Aboriginal Cultural Heritage Assessment Report (ACHAR)	OzArk	The Revised ACHAR provides a response to submissions from the public and DCCEEW Heritage NSW. It considers the Amended Project layout and evaluates the potential impacts to Aboriginal cultural heritage associated with the refinement of the Project Area and Disturbance Footprint. The Revised ACHAR also provides further evidence of engagement with RAPs and additional survey undertaken along the external road that provides access to the Project.	Appendix F of the Amendment Report
Updated Statement of Heritage Impact (SOHI)	OzArk	The Revised SOHI addresses submissions from the public and TRC. It evaluates the direct and indirect impacts on historic heritage items from the Amended Project layout, which includes refinements to the Project Area and Disturbance Footprint.	Appendix G of the Amendment Report
Updated Biodiversity Development Assessment Report (BDAR)	ERM	Updates to the BDAR addresses matters raised in the submissions from the public and DCCEEW's Biodiversity, Conservation and Science (BCS) Directorate. The BDAR also assesses the impacts on biodiversity of the Amended Project layout, particularly the reduction of Disturbance Footprint, solar array and BESS areas.	Appendix E of the Amendment Report

Assessment	Author	Overview	Appendix Ref.
Updated Traffic Impact Assessment (TIA)	Amber	Updates to the TIA provides a response to submissions from the public and TfNSW about the traffic assessment undertaken for the Project's EIS. The Updated TIA provides further assessment on traffic impacts associated with the changes in traffic volumes and transportation routes for the Amended Project.	Appendix L of the Amendment Report
Addendum to Landscape and Visual Impact Assessment (LVIA)	Moir	The Addendum to LVIA addresses the submissions from the public and the TRC about the visual impacts of the Project, particularly in relation to the visibility of the Project from the four (4) items from the historic listed site Bendemeer Station. It also evaluates the visual impacts on receivers from the Amended Project, including the removal of PV modules and reduction of panels height. The Addendum to LVIA has further informed the Project Area refinement, which has increased in 0.5 ha to the southwest to allow for screen planting following changes to the solar array area.	Appendix I of the Amendment Report
Amended Flooding Impact Assessment (FIA)	Engeny	The amended FIA provides a response to the public submissions about the risks of flooding, sedimentation and erosion associated with the Project. It further evaluates the changes in local flood regimes under two scenarios, existing and developed with the Amended Project layout.	Appendix K of the Amendment Report
Updated Noise Impact Assessment (NIA)	ERM	The Updated NIA addresses matters raised during the public exhibition about noise and vibration, in particular the impacts of the noise associated with the construction of the Project and the effect of infrasound of the operation of the Project.	Appendix H of the Amendment Report
Updated Preliminary Hazard Analysis (PHA)	Riskcon	The Updated PHA provides a response to the public submissions and assess the potential hazards and risks associated with the amended Project.	Appendix M of the Amendment Report
Technical Memo – Bushfire Risk Assessment (Bushfire memo)	ERM	The Bushfire memo assists with providing a response to the public submissions about the risks of bushfire of the amended Project. It assesses the consistency of the Amended Project and all bushfire mitigations with the Bush Fire Assessment Report submitted as part of the original EIS, and the 'Planning for Bush Fire Protection Guidelines' (NSW RFS, 2019a).	Appendix N of the Amendment Report

Assessment	Author	Overview	Appendix Ref.
Amended Economic Assessment	Gillespie Economics	The Amended Economic Assessment addresses matters raised during the public exhibition which relate to the economic impacts of the Project on nearby properties and the local and regional community. It further evaluates the potential economic impacts of the construction and operation of the Amended Project on the regional and NSW economy. Key changes to the Project of relevance include FTE reduction during peak construction period, and refinements to the Project Area, Disturbance Footprint and Project elements, such as BESS, substation, switching station, O&M and internal roads.	Appendix O of the Amendment Report
Updated Social Impact Assessment (SIA)	ERM	The Updated SIA addresses matters raised in public submissions which relate to social impacts and includes a response to DPHI's review of the SIA prepared for the Project EIS. The Updated SIA further evaluates the Amended Project and evaluates the impacts on social aspects such as employment and procurement, local disruption, accommodation and worker influx, land use, and cumulative impacts.	Appendix P of the Amendment Report

4. RESPONSE TO SUBMISSIONS

This Section responds to the submissions received from government agencies, TRC, the public and community organisations. A submitter ID number is listed for the submission to identify which stakeholders have raised each submission. **Appendix A** identifies each submitter ID number.

4.1 RESPONSE TO GOVERNMENT AGENCIES SUBMISSIONS AND LOCAL COUNCIL

No government agency has objected to the Project, several have either provided comments seeking additional information or clarification or have recommended specific consent conditioning to meet their requirements. A copy of the original submissions is available on the Major Projects portal: [Bendemeer Solar Farm | Planning Portal - Department of Planning and Environment \(nsw.gov.au\)](#). A response to each of the matters raised in submissions to the Project by the government agencies is provided in **Table 4-1** to **Table 4-9** and by TRC in **Table 4-10**.

Additional issues raised by DPHI relating to biodiversity and social impact assessment via email post-February 2024 have been summarised and responded to in **Table 4-11** and **Table 4-12**.

TABLE 4-1 DEPARTMENT OF PRIMARY INDUSTRIES – AGRICULTURE (DPI AG)

Ref No.	Theme	Submission	Response	Where Addressed
DPI AG - 01	Soils and Agriculture (Agrisolar and Grazing Management)	The entire site is over 1,381 ha in area and has historically supported extensive livestock grazing, producing beef, mutton, and wool. Appendix L estimates the annual income of the project area (606.4ha) to be @\$250,000 for cattle and @\$242,000 for merino ewes. The EIS uses the justification of sheep grazing with the solar array ('Agrisolar') to mitigate the impacts of lost agricultural production. It is indicated that stocking rates will decrease by only 20% as a result of the project, without demonstrating how this will be managed other than 'the project area will be designed to enable sheep to move efficiently between the solar farm and other paddocks'. The nominal loss of production is also used to claim there will be 'negligible' impact on local, regional, and state agricultural services as a result of the project.	Of the 606.9 ha Project Area, 237.7 ha, or 39%, falls outside the amended disturbance footprint. This area will continue agricultural operations at the current capacity. The remaining 369.2 ha, which comprises the amended Disturbance Footprint will be used for agrisolar, except for 18.5 ha where agriculture will be entirely removed during operation. Therefore, a total area of 350.7 ha will be available for agrisolar. Where agrisolar is implemented, livestock will graze under and around solar panels at approximately 69% of current stocking rate. A 31% reduction in grazing capacity for the Disturbance Footprint was considered acceptable, particularly in the context that when considering the broader Project Area there is only a 20% overall decrease in stocking rate across the broader Project Area. The Updated SAIA (updated based on amended Project layout) notes this reduction results in an impact on agricultural productivity of the Project Area during operation of \$54,438 per year. This represents 0.02% of the value of agricultural production in the Tamworth Regional LGA, and <0.001% of cattle and <0.00025% of sheep productivity in NSW. This reduction in agricultural productivity was assessed to present a negligible risk to the viability of livestock grazing industries and support services within the Tamworth Regional LGA and broader state, based on the nature and scale of these industries. The reduction is also offset by the rental income the landowner will receive from the Applicant. A series of management plans will be developed to successfully implement controls that will ensure impacts to agriculture are mitigated during the life of the Project, and that impacts to agriculture are at the level as reported in the Updated SAIA. These include a Grazing Management Plan which will specify how agrisolar activities will be implemented to meet the stated agricultural productivity estimates for the operational phase of the Project. The Grazing Management Plan will use the estimated agricultural production baseline provided in the EIS to demonstrate the potential for sheep grazing with the solar development. The Grazing Management Plan will also detail livestock management and stocking rates required to maintain groundcover at 70% in accordance with industry standards, based on the former NSW Land & Water Conservation (LWC) guideline 'The Cover Equation – How Much is Enough?' (LWC, 1995). Further, weed, pest (biosecurity) and groundcover management will be integrated with the Grazing Management Plan. The Grazing Management Plan will be included as a condition of consent should the application be approved and developed in consultation with NSW Local Land Services.	Appendix J of the Amendment Report

Ref No.	Theme	Submission	Response	Where Addressed
DPI AG - 02	Soils and Agriculture (Agrisolar and Grazing Management)	NSW DPI requests that the Applicant prepare a Grazing Management Plan to specify arrangements for 'Agrisolar' activities and continued agricultural productivity for the operational phase of the project. The Grazing Management Plan should use the estimated agricultural production baseline provided in the EIS to demonstrate the potential for sheep grazing with the solar development. The Grazing Management Plan should also detail livestock management and stocking rates to maintain groundcover at 70% in accordance with industry standards. Further, weed, pest (biosecurity) and groundcover management need to be integrated with the Grazing Management Plan. The Grazing Management Plan should be included as a condition of consent should the application be approved and developed in consultation with NSW Local Land Services.	Noted. The Applicant is committed to preparing a Grazing Management Plan.	Appendix B of the Amendment Report
DPI AG - 03	Project Description	The EIS does not commit to the removal of underground infrastructure at the closure of the project, with a decommissioning and rehabilitation plan to be prepared one year from the closure of the project. It is NSW DPI Agriculture's preference that all buried infrastructure (including cabling) to a depth of 500 mm is removed when the facility is decommissioned. NSW DPI requests this be a condition of consent should the application be approved.	Noted. The Applicant is committed to addressing all requirements of the condition of consent.	In this table
DPI AG - 04	Community Engagement (LUCRA Conflicts and Mitigation Measures)	The EIS indicates that the project is well accepted in the community and business groups due to positive benefits of local employment and clean energy. The EIS also states that nearby and adjacent landholders will not be affected by the project due to the proposed mitigation measures. The Land Use Conflict Risk Assessment (LUCRA) in Appendix L estimates 39 potential risks with risk reduction controls such as vegetation screening, soil erosion and sedimentation plan, bushfire plan, etc. There is little evidence of consultation with affected stakeholders to discuss conflicts or mitigation measures, but acknowledgement that 'ongoing consultation with stakeholders will identify and address concerns as they arise'. NSW DPI supports ongoing, effective consultation with nearby landholders as part of the project's construction, operation, and decommissioning.	Evidence of consultation with stakeholders undertaken by the Applicant during development of the EIS is provided in Section 5 and Appendix E of the EIS. All engagement was captured in the Project's Stakeholder Register. Targeted consultation comprising face-to-face interview in February 2023 was undertaken to inform the SIA. This engagement aimed to identify the local community values, strengths and vulnerabilities, as well as their perspective on the economy, infrastructure, and environment, which includes items raised in relation to land use conflict (refer Section 4 of the Updated SIA). The targeted SIA consultation provided feedback on the Project and an indication of the sentiment toward the Project from neighbouring landholders. All engagement undertaken for the Project, along with an evaluation of land use conflict risks raised for other solar farm projects in the region, formed the basis of the LUCRA. As presented in the EIS, neighbouring landowners were concerned about the impact of the Project on visual amenity, biodiversity, traffic, land and soils, biosecurity, erosion and sediment run-off, property values, and agricultural impact on grazing activities. These items are all captured in the LUCRA. Additionally, during this engagement the Applicant provided key information from relevant environmental studies, such as impacts and benefits, to the community members and affected landholders via email, newsletters, and in face-to-face meetings (refer Section 5 and Appendix E of the EIS). The Applicant is committed to effective and genuine engagement with stakeholders and the local community to seek feedback on and to help inform the Project. Since lodgement of the EIS in July 2023, the Applicant has undertaken further engagement with stakeholders to discuss the amendments to the Project and concerns raised in submissions. Through an extensive engagement program and sharing of communication materials with updated technical assessments for the Amended Project, the Applicant aims to build an understanding and address stakeholders' potential concerns. Specific engagement related to the submissions is documented within this report (refer Section 3.1) and engagement related to the proposed amendments is summarised in Section 5 of the Amendment Report. Engagement will continue through subsequent phases of the Project. As noted in the EIS and Amendment Report, stakeholders that have been and will continue to be engaged includes neighbouring landholders.	Section 3.1 Section 5 of the Amendment Report Section 5 and Appendix E of the EIS

Ref No.	Theme	Submission	Response	Where Addressed
DPI AG - 05	Cumulative Impact (Soils and Agriculture)	The EIS tables 20 other renewable projects including the adjoining Bendemeer Wind Farm within a 99 km distance of the project site in the New England Renewable Energy Zone. As noted, the EIS uses Agrisolar to mitigate concerns around the loss of agricultural land on the site, and also the cumulative impacts of large-scale renewable projects on the loss of productive agricultural land within the Tamworth Regional LGA and wider region. There is also no consideration of alternative sites.	The Applicant has considered alternative sites for the Project as described in the EIS (Section 2.5). The Project Area was identified as highly suitable due to the available solar resource, favourable topography, land predominantly cleared and currently used for agricultural activities (grazing), proximity to existing 330 kV line for grid connection, suitable distance and limited viewpoints from the main Bendemeer village, and site accessibility and ownership.	Section 2.5.2 of the EIS
DPI AG - 06	Soils and Agriculture (Pest and Weed)	The EIS commits to the preparation of a Pest and Weed management plan. NSW DPI requests that this be included as a condition of consent should the application be approved.	Noted. The Applicant is committed to developing a Pest and Weed Management Plan, and for its integration with the Grazing Management Plan as per DPI AG - 02.	Appendix B of the Amendment Report

TABLE 4-2 DEPARTMENT OF CLIMATE CHANGE, ENERGY, THE ENVIRONMENT AND WATER - HERITAGE NSW (DCCEEWS HNSW)

Ref No.	Theme	Submission	Response	Where Addressed
DCCEEWS HNSW - 01	Aboriginal Cultural Heritage (Engagement)	Registered Aboriginal party consultation: information provided in Appendix 1 is incomplete. The following must be addressed: The project notification example provided is for a project at Fern Bay and does not relate to the current project. Please provide a copy of the notification for the correct project.	A copy of the notification letter sent to Aboriginal community groups for the Project has been updated and is provided in Revised ACHAR <i>Appendix 1 Figure 5</i> .	Appendix F of the Amendment Report
DCCEEWS HNSW - 02	Aboriginal Cultural Heritage (Engagement)	Please provide evidence that the draft assessment methodology (example as provided) was sent to all Registered Aboriginal Parties (such as an email with all relevant email addresses shown).	A copy of the cover letter sent out to RAPs, which included a copy of the methodology used to develop the Project's ACHAR is provided in Revised ACHAR <i>Appendix 1 Figure 6</i> . An email was also sent on 11 November 2022, with the assessment methodology to Steve Talbot for his records following his late registration, refer <i>Appendix 1 Figure 9</i> of Revised ACHAR. Additionally, the methodology provided is available in <i>Appendix 1 Figure 7</i> of Revised ACHAR. Only one response was received from Didge Ngunawal Clan on 7 December 2021 advising that they had reviewed and supported the methodology which is included in <i>Appendix 1 Figure 8</i> of Revised ACHAR.	Appendix F of the Amendment Report
DCCEEWS HNSW - 03	Aboriginal Cultural Heritage (Engagement)	The project methodology shows a different project site to that assessed in the ACHAR. Please confirm that the Registered Aboriginal Parties were advised of the change in the project site as part of the consultation process.	The Project Area assessed in the ACHAR is within the Project Site shown in the methodology that was sent to RAPs (refer Figure 1-1 and Table 3-1 of <i>Appendix 1 Figure 7</i> of the Revised ACHAR). RAPs were also informed of additional surveys of the external road work area undertaken in response to submissions received from Heritage NSW. The letter distributed to RAPs is provided in <i>Appendix 1 Figure 14</i> of the Revised ACHAR. An additional email was sent out to inform RAPs of the amended Project layout and Disturbance Footprint, and that the 2 identified potential archaeological deposits (PADs) recorded during surveys for the ACHAR will still be avoided by the amended Project (refer <i>Appendix 1 Figure 15</i> of the Revised ACHAR).	Appendix F of the Amendment Report
DCCEEWS HNSW - 04	Aboriginal Cultural Heritage (Engagement)	Figure 1 references the provision of a project update email on 26 June 2022 and an email requesting fieldwork rates and insurances sent on 4 July 2022. Please provide copies of this correspondence to demonstrate ongoing consultation.	The Project update letter is available at <i>Appendix 1 Figure 10</i> of Revised ACHAR, and request for fieldwork rates and insurances at <i>Appendix 1 Figure 11</i> of Revised ACHAR.	Appendix F of the Amendment Report
DCCEEWS HNSW - 05	Aboriginal Cultural Heritage (Engagement)	An example of the letter sent to the Registered Aboriginal Parties in relation to review of the draft ACHAR is provided. Please provide evidence that the letter and accompanying ACHAR was sent to all Registered Aboriginal Parties (such as an email with all relevant email addresses shown).	An email was sent to RAPs on 20 February 2023 inviting RAPs to review the ACHAR, and to provide comments on the cultural values of the site and broader Project Area. The emails sent to RAPs is provided in <i>Appendix 1 Figure 13</i> of Revised ACHAR.	Appendix F of the Amendment Report
DCCEEWS HNSW - 06	Aboriginal Cultural Heritage (Cultural Value)	The ACHAR documents that Aaron Talbott (a Registered Aboriginal Party for the project) provided cultural information that the project area is associated with a creation story and songline. Please provide information on the interaction between harm to the landscape resulting from the project and the potential impacts to the associated cultural values.	Aaron Talbott, representing AT Gomilaroi Cultural Consultancy, noted that outcropping rock present within the Project Area indicates the presence of Warabah (longneck turtle) in its physical state. Locations of outcropping rock are present within the Disturbance Boundary, some of which will likely be impacted by the Project. This may have an impact on the creation story and song lines of the Warabah. However, outcropping rock is abundant across the broader Project area, surrounding land and throughout the New England region; therefore, the association with Warabah is not limited to a specific area of outcropping rock within the Disturbance Boundary. This is further discussed in Section 3.4 and Section 8.1.2 of the Revised ACHAR.	Appendix F of the Amendment Report

Ref No.	Theme	Submission	Response	Where Addressed
DCCEEW HNSW - 07	Aboriginal Cultural Heritage (Landform Mapping)	The survey unit mapping shown in Figure 4-5 of the ACHAR identifies two landform types only within the project area, being ridgelines/crests and undulating. The 'undulating' landform type is defined as being categorised by sloping landforms with gentle gradients. In contrast, Table 5-6 identifies that 'moderate to steep landforms dominate the project area'. This apparent contradiction appears to result from the lack of distinction between different classes of slope within the 'undulating' landform group and the boundary to ridgeline/crest landforms. Given that the predictive model for the area notes the association between slope inclination and the likelihood that Aboriginal objects (primarily artefact scatters/isolated artefacts) will be present, it is critical that more detailed landform mapping be undertaken. This should include categorisation of slopes by slope inclination with reference to the categories outlined in Table 2 of the 'Landform' chapter of the Australian Soil and Land Survey Field Handbook (3rd edition).	Survey units have been revised and updated for the amended Project (refer Section 4.1.1 of the Revised ACHAR), and can be summarised as follows: Survey unit 1 gently inclined slopes, across 227.5 ha of the amended Project Area. It is characterised by slopes averaging 3 degrees slope in the north of the Project Area. Generally consisting of simple slopes. Survey unit 2 moderately inclined slopes, across 175.4 ha of the amended Project Area. It is characterised by slopes averaging 10 degrees slope. These landforms are mostly adjacent to the Macdonald River. Survey Unit 3 ridgelines and crests, across 204 ha of the amended Project Area. It is characterised by elevated crests and minor ridgelines. Also includes spurs. Based on the revised survey units identified above, the predictive model for the amended Project has been updated to indicate the probability of landforms within the Project Area to contain Aboriginal objects and what types of sites may be present within the Project Area (refer Section 5.5 of Revised ACHAR).	Appendix F of the Amendment Report
DCCEEW HNSW - 08	Aboriginal Cultural Heritage (Landform Mapping)	The identification of two areas of PAD appears to be based on the presence of level or near level landforms associated with Perrys Creek and (at a greater distance) the Macdonald River. However, in the absence of more accurate landform mapping, there is no capacity to see whether other, similar landforms are present but were not recorded during the survey.	The Project Area was subject to full pedestrian survey with surveyors spaced 10 to 20 m apart. On each of the four days of survey, two OzArk archaeologists and up to four Aboriginal site officers from the RAPs were present. While landform mapping provides a basis for determining landforms and their archaeological potential, it is no substitute for field survey. Given the entire Project Area and landforms were surveyed via systematic transects, it was concluded that there are no further PADs present across the Project Area. This is further discussed in Section 6 of the Revised ACHAR.	Appendix F of the Amendment Report
DCCEEW HNSW - 09	Aboriginal Cultural Heritage (Survey)	Section 6.1 of the ACHAR states that the external road work area (as shown in Figure 1-3) was not subject to survey. Please include provision for the survey of this area, with the results of survey to be included in the Aboriginal Cultural Heritage Management Plan to be developed for the project, including any requirements for additional management or mitigation works.	Initial examination of the landforms within the external road work area determined it to have low archaeological potential (due to slopes, distance to water, disturbance etc.). The external road work area was subsequently extensively surveyed on 14 November 2023 by an OzArk archaeologist (refer Figure 6-1 of Revised ACHAR). No Aboriginal sites or areas of PAD were identified during the additional survey.	Appendix F of the Amendment Report
DCCEEW HNSW - 10	Aboriginal Cultural Heritage	Section 9.2.2.2 and 9.2.2.3 specify that new sites will only be registered on AHIMS if they are 'found to be of cultural significance'. In accordance with Section 89A of the National Parks and Wildlife Act 1974, it is an offence to fail to record the location of an Aboriginal object within a reasonable timeframe. Consideration of the significance of the object is not relevant. This reference should be removed. Section 9.2.2.2 should also reference consideration of avoidance of harm to a newly identified site where the site is of high significance.	The Revised ACHAR has amended protocols related to the discovery of newly identified Aboriginal objects within or outside the Disturbance Boundary. If found to be cultural, the site location will be registered with Aboriginal Heritage Information Management System (AHIMS) and a site card submitted (if outside). The above is proved in Section 9.2.2.2 and Section 9.2.2.3 of the Revised ACHAR.	Appendix F of the Amendment Report

TABLE 4-3 DEPARTMENT OF CLIMATE CHANGE, ENERGY, THE ENVIRONMENT AND WATER – WATER (DCCEEW W)

Ref No.	Theme	Submission	Response	Where Addressed
DCCEEW W - 01	Water Resources, Hydrology and Flooding (Water Supply and Licencing)	Recommendation – Prior to Determination That the Applicant demonstrates the ability to obtain a secure and appropriately authorised water supply for the project. This is to include relevant agreements where required and to demonstrate sufficient water entitlements can be acquired where necessary. Explanation Multiple options to source the Project’s water supply have been proposed however none have been confirmed. A landholder has been identified who holds a Water Access Licence (WAL) with adequate entitlement in the Mid Macdonald River Water Source for all stages of the Project. However, DCCEEW Water recommends that the Applicant should provide confirmation that sufficient water supply and entitlements can be acquired where necessary.	Water requirements for the construction of the Project are estimated to be 0.4 megalitre per year (ML/year) of potable water and 110 ML/year of non-potable water (over an 18-month construction period). During operations (minimum of 30 years) 20 kL/year of potable and 2 ML/year of non-potable water will be required. Potable or drinking water will be required for the construction and operational Project workforce. During operation of the Project, potable water will be collected in rainwater tanks. During construction or operations as necessary during period of drought/dry potable water will be imported. Non-potable water will be required primarily for concrete batching, roadworks, earthworks and dust suppression and potentially for water of revegetated areas. A range of options to source water to meet construction needs were presented in Section 6.8 of the EIS. Since public exhibition of the EIS the Applicant has investigated potential supply options including surface water, groundwater, council water supply and recycled wastewater. There is an existing water access licence (WAL) within the Project Area: • WAL 32495; • Approval type: Water Supply Works and Water Use; • Water Source: Namoi and Peel Unregulated Rivers Water Source - Mid Macdonald River Water Source; • Work type: diversion works-pumps; • Location: Lots 1, 2 and 3 of DP 1211502; and • Share components units: 60 units (60 ML/year). Two groundwater bores were identified on the property for the Project, one within the Project Area and to the east of the Project Area. These groundwater bores are both listed as functioning, with further detail provided below: • GW965744: located within the Project Area and was drilled to a total depth of 95.1 m. This bore is listed for Water Supply use; and • GW904282: located outside of and to the east of the Project Area and was drilled to a total depth of 49 m. This bore is listed for stock and domestic uses. The Applicant has a memorandum of understanding in place with the landowner for the use of these WALs and water supply works. A formal agreement will be developed with commercial terms with the EPC contractor. The volume of entitlement held under WAL 32495 of 60 ML/year is adequate to meet the Project demands during construction and operation. Construction would effectively occur across two WAL years, meaning there is 120 ML available for the estimated 110 ML total to be used. This commercial arrangement with a host or neighbouring landholder is consistent with other construction projects in NSW. The Project description has been amended to provide for the use and storage of water as described above, further detail relating to the proposed water supply infrastructure and storage is provided in the Amendment Report Appendix A.	Appendix A of the Amendment Report

Ref No.	Theme	Submission	Response	Where Addressed
DCCEEW W - 02	Water Resources, Hydrology and Flooding (Water Supply and Licencing)	Recommendation – Post Approval If groundwater will be intercepted during the Project, a Water Access Licence (WAL) with sufficient entitlement to account for the groundwater take must be obtained, unless an exemption applies. A water supply work approval will also be required from DCCEEW Water for any water take infrastructure, e.g., pumps or bores, where these have not been identified and assessed as part of the project assessment. Explanation Under the <i>Water Management Act 2000</i>, if groundwater is intercepted a WAL must be obtained prior to any water take occurring unless an exemption under Clause 7 of Schedule 4 of the Water Management (General) Regulation 2018 applies. Water supply works need to be assessed as part of the project assessment to be excluded from relevant approval requirements under the <i>Water Management Act 2000</i>. An exemption may be available if water take is less than or equal to 3 ML per water year, subject to the development meeting other exemption requirements, such as: 1. the water is not taken for consumption or supply; 2. the person claiming the exemption keeps a record of the water taken under the exemption and provides this to the Minister within 28 days of the end of the water year; and 3. the records are kept for 5 years. Further information on these requirements and other information on exemptions, including an exemption application form and a form to report and record water taken, can be found on: https://water.dpie.nsw.gov.au/licensing-and-trade/licensing/groundwater-wal-exemptions.	A water supply work approval will be obtained by the Applicant from WaterNSW for any water take infrastructure required for the Project (refer DCCEEW W – 01).	Appendix A of the Amendment Report
DCCEEW W - 03	Water Resources, Hydrology and Flooding (Controlled Activities on Waterfront Land)	Recommendation – Prior to Determination That the Applicant review works proposed within waterfront land (40m of a watercourse) to demonstrate consistency with the Guidelines for Controlled Activities on Waterfront Land available at: https://water.dpie.nsw.gov.au/licensing-and-trade/controlled-activity-approvals/guidelines Explanation The EIS has not demonstrated how works that are within 40m of watercourses located in the project area are consistent with the Guidelines for Controlled Activities on Waterfront Land (DPE 2022).	Waterways within the Project Area are ephemeral streams of Strahler 1st and 2nd order only and are associated with existing farm dams. Surveys in 2023 observed that these streams were evidently modified as drainage lines for the dams. The nearest higher order streams are Perrys Creek (3rd) and Macdonald River (7th) and classified as waterfront land are not within 40 m of the Project Area. As per Table 2 of the Guidelines for Riparian Corridors on Waterfront Land (DPE, 2022), development within 1st and 2nd order streams are recommended to exclude 10 m and 20 m each side of the waterway respectively. PV modules and associated cabling would traverse these ephemeral streams, and it is understood that these structures are acceptable. No building footings would be constructed within the riparian corridors of the ephemeral streams, and road crossings would be permitted as per the riparian corridor matrix (Table 2 of the Guidelines for Riparian Corridors on Waterfront Land (DPE, 2022)). The amended Project layout also retains all existing farm dams within the Disturbance Footprint. The following measures will be incorporated into the design of the works and controls included in the Soil and Water Management Plan (SWMP): • A site-specific erosion and sediment control plan will be prepared for the Project for all works on waterfront land; • Infrastructure will be maintained outside of the vegetated riparian zone, where practicable; • To avoid the need to trench through stream beds, stream crossings for co-location of services will be utilised, where practicable; • To mitigate any areas with increased potential for erosion due to changes in flow regimes associated with the Project infrastructure, disturbed areas will be rehabilitated, and scour protection will be provided to bed and banks, as required; and • Works on waterfront land will be undertaken when fish passage is unlikely to occur, where practicable. Relevant DPI Fisheries guidelines will be considered during the detailed design of the Project for any crossings. Any temporary waterway crossings (if required) will be removed immediately upon completion of the various stages of construction.	In this table and Appendix B of the Amendment Report

TABLE 4-4 DEPARTMENT OF PLANNING, HOUSING AND INFRASTRUCTURE – CROWN LANDS (DPHI CL)

Ref No.	Theme	Submission	Response	Where Addressed
DPHI CL - 01	Crown Lands	As no Crown land, roads or waterways are in the vicinity of the proposal/are affected by the proposal, Crown Lands has no comments at this time.	Noted. The Project Area does not encompass Crown Lands.	In this table

TABLE 4-5 BIODIVERSITY, CONSERVATION AND SCIENCE (BCS)

Ref No.	Theme	Submission	Response	Where Addressed
BCS - 01	Biodiversity	BCS has reviewed the EIS and BDAR and considers that further work is required to address issues with the BDAR to comply with the Biodiversity Assessment Method 2020 (BAM). Further detail is required to identify how impacts were avoided or minimised. The BDAR should be updated to ensure that all native vegetation has been correctly identified, and that all candidate species credit species which require assessment have been adequately addressed. Priority issues identified are as follows: Additional evidence is needed to demonstrate adequate avoidance and minimisation measures to reduce potential impacts on biodiversity values, especially direct impacts on serious and irreversible impact (SAII) entities. Reducing the direct impact to the SAII entity Box Gum Woodland Critically Endangered Ecological Community (CEEC) will reduce the likelihood of the proposal having a serious and irreversible impact.	An updated BDAR has been prepared to address the submissions from the Biodiversity, Conservation and Science (BCS) Division of DCCEEW. Further detail on how the key issues raised by the BCS have been addressed are provided under each topic raised in Attachment A of the submission in the below table. Regarding the priority issue identified to address avoidance and minimisation measures to SAII entities, the proposed layout has undergone substantial refinement from the initial proposed disturbance footprint to the current proposed amended design. Further reduction in impacts to SAII entities has been achieved through the amended design, so that the majority of the critically endangered White-Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland Threatened Ecological Community (Box Gum Woodland TEC) has been retained across the Subject Land. A summary of the measures to avoid areas of Box Gum Woodland TEC include: - The overall Disturbance Footprint has been reduced by 46% from the initial 680 ha to the current 369.2 ha which is a total avoidance of 310.8 ha; - The current 369.2 ha Disturbance Footprint has been reduced by 23% from the 476.6 ha assessed in the EIS (further avoidance of 107.4 ha); - The impact area of BC Act listed Box Gum Woodland TEC within the Disturbance Footprint has been reduced by 64% from the initial 154.5 ha to the current 55.3 ha which is a total avoidance of 99.2 ha; - The current 55.3 ha impact to BC Act listed Box Gum Woodland TEC is a 47% reduction from the 103.8 ha assessed in the EIS (avoidance of 48.5 ha); - The impact area of EPBC Act listed Box Gum Woodland TEC within the Disturbance Footprint has been reduced by 76% from the initial 97.4 ha to the current 23.8 ha which is a total avoidance of 73.6 ha; - The current 23.8 ha impact to EPBC Act listed Box Gum Woodland TEC is a 61% reduction from the 60.3 ha assessed in the EIS (avoidance of 36.5 ha). Note: the impact area of EPBC Act listed Box Gum Woodland TEC is wholly within that of BC Act listed Box Gum Woodland TEC, i.e. total TEC clearance area of 55.3 ha only.	Appendix E of the Amendment Report
BCS - 02	Biodiversity	Review of the native vegetation extent within the subject land and within 1500 metres of the subject land is required to address inconsistencies in the BDAR and ensure all native vegetation is appropriately mapped. In addition, evidence supporting the identification of non-native vegetation should be provided in the BDAR where appropriate.	The native vegetation extent within the Subject Land has been field-verified in accordance with the BAM 2020, and no changes are proposed to the PCT classification, vegetation zones and native vegetation extents within this area. Within the 1,500 m buffer assessed for landscape attributes, the extent of native vegetation cover has been reviewed using up-to-date aerial photography and by extrapolating field data to identify additional areas of native vegetation. Section 2.2 and Figure 2-1 of the BDAR have been updated to show these additional areas of native vegetation within the 1,500 m buffer landscape assessment area.	Appendix E of the Amendment Report
BCS - 03	Biodiversity	Justification is needed to support the removal of candidate species credit species from further assessment, and to address the targeted flora species survey effort, to ensure the species credit obligation calculated for the proposal is correct.	Section 4.4.3 of the BDAR has been updated to include specific detail on the flora survey effort completed for each candidate species in each PCT across the development footprint. This includes a list of each of the candidate species, the associated PCTs for these species from Bionet and the survey effort completed in each relevant season.	Appendix E of the Amendment Report

Ref No.	Theme	Submission	Response	Where Addressed
BCS - 04	Biodiversity	The issues identified above may require additional surveys. Updates will be required to the BDAR, BAM Calculator and spatial data. BCS recommends that the Department requests an updated BDAR that addresses these priority issues and incorporates all the recommendations listed in Attachment A. The updated BDAR should be provided with the Response to Submissions report. Detailed comments are provided in Attachment B.	Since completion of the EIS, additional field surveys have been completed, as summarised in Section 4 of the BDAR and including: - Targeted Tusked Frog in Spring 2023 – 26 frog transects totalling 6 surveys; - Habitat assessments for Bush-stone Curlew to assess quality and condition of suitable coarse woody debris; - Review of existing hollow-bearing tree data and field verification for suitability of breeding hollows for threatened owls; and - Targeted flora surveys in relevant PCTs for <i>Diuris pedunculata</i>	Appendix E of the Amendment Report
BCS - 05	Biodiversity	1.1 Revise the avoid and minimise measures proposed in the Biodiversity Development Assessment Report (BDAR) to demonstrate adequate avoidance of biodiversity values in accordance with section 7.1 of the Biodiversity Assessment Method 2020 (BAM).	The amended layout has undergone substantial refinement from the initial proposed disturbance footprint to the current proposed amendment design with an aim to avoid and minimise impacts to biodiversity in accordance with section 7.1 of the BAM. Section 6.1.2 and Section 8.1.1.1 of the BDAR have been updated to reflect the amendments and provide details on avoidance and minimisation measures, including the following: - The overall Disturbance Footprint has been reduced by 46% from the initial 680 ha to the current 369.2 ha which is a total avoidance of 310.8 ha; - The current 369.2 ha Disturbance Footprint has been reduced by 23% from the 476.6 ha assessed in the EIS (further avoidance of 107.4 ha); - The impact area of BC Act listed Box Gum Woodland TEC within the Disturbance Footprint has been reduced by 64% from the initial 154.5 ha to the current 55.3 ha which is a total avoidance of 99.2 ha; - The current 55.3 ha impact to BC Act listed Box Gum Woodland TEC is a 47% reduction from the 103.8 ha assessed in the EIS (avoidance of 48.5 ha); - The impact area of EPBC Act listed Box Gum Woodland TEC within the Disturbance Footprint has been reduced by 76% from the initial 97.4 ha to the current 23.8 ha which is a total avoidance of 73.6 ha; - The current 23.8 ha impact to EPBC Act listed Box Gum Woodland TEC is a 61% reduction from the 60.3 ha assessed in the EIS (avoidance of 36.5 ha). Note: the impact area of EPBC Act listed Box Gum Woodland TEC is wholly within that of BC Act listed Box Gum Woodland TEC, i.e., total TEC clearance area of 55.3 ha only	Appendix E of the Amendment Report
BCS Attachment A (AA)				
BCS AA - 01	Biodiversity	1.2 Review the design and footprint of the proposal to seek to reduce the direct impact to serious and irreversible impact entities, particularly to Box Gum Woodland Critically Endangered Ecological Community (CEEC).	A further reduction in impacts to SAI entities has been achieved through the amended design, so that the majority of the Box Gum Woodland TEC has been retained across the Subject Land. This reduction in SAI is the same area of Box Gum Woodland TEC avoided and described in submission reference BCS – 05 above.	Appendix E of the Amendment Report
BCS AA - 02	Biodiversity	2.1 Review the mapping of scattered trees in the subject land. If the scattered trees are nonnative, appropriate evidence should be provided in the BDAR.	The BDAR has been updated to include detail on the scattered trees located within Category 1 Land in the development footprint. A new Section 3.2.4 has been added to the updated BDAR and includes a table of all scattered trees, defined by their class from the BAM 2020. The BAM-C has also been updated to calculate the required offset credit requirement generated by these scattered trees.	Appendix E of the Amendment Report
BCS AA - 03	Biodiversity	2.2 If the review of the scattered trees described in Recommendation 2.1 determines the trees in the subject land to be native, the trees should be assessed in accordance with section 4 or Appendix B of the BAM as appropriate.	As noted in the response to the above submission, all scattered trees have been identified and defined by their class as required in Appendix B of the BAM, including a calculation of offset credits generated by these scattered trees.	Appendix E of the Amendment Report

Ref No.	Theme	Submission	Response	Where Addressed
BCS AA - 04	Biodiversity	3.1 Revise vegetation mapping to include all areas of native vegetation and re-calculate the percentage of native vegetation cover for the proposed project. Update the Biodiversity Assessment Method Calculator (BAM-C) and BDAR accordingly.	The native vegetation extent within Subject Land has been field-verified in accordance with the BAM 2020, and no changes are proposed to the PCT classification, vegetation zones and native vegetation extents within this area. Within the 1,500 m buffer assessed for landscape attributes, the extent of native vegetation cover has been reviewed using up-to-date aerial photography and by extrapolating field data to identify additional areas of native vegetation. Section 2.2 and Figure 2-1 of the BDAR have been updated to show these additional areas of native vegetation within the 1,500 m buffer landscape assessment area. The revised vegetation cover class of 30-70% cover within the 1,500 m assessment area has been transferred to the BAM-C.	Appendix E of the Amendment Report
BCS AA - 05	Biodiversity	3.2 Review the list of candidate species following the native vegetation cover review and determine whether additional candidate species require assessment. Where relevant, recalculate the biodiversity credits for the project.	The revised vegetation cover class of 30-70% cover within the 1,500 m buffer assessment area has been transferred to the BAM-C and an updated biodiversity credit calculation report has been completed and is provided in Appendix D of the updated BDAR.	Appendix E of the Amendment Report
BCS AA - 06	Biodiversity	4.1 Review the justifications for excluding candidate flora species credit species including Inverell cycad, large-leafed Monotaxis and small snake orchid. Conduct a targeted survey to determine presence or absence, obtain an expert report or assume presence for all species that cannot be excluded from the list of candidate species credit species.	Inverell Cycad The Inverell Cycad is a very conspicuous species and, if present can be found at any time of year (this is evident from the survey period for this species specified in Bionet being any time of the year). The understory of the Subject Land, particularly the disturbance footprint is open and this species, if present, would be readily observable. As no individual of this species were observed during any of the field surveys, it has been excluded as a candidate species. Large-leaved Monotaxis The Subject Land does not contain any preferred habitat for this species, that being rocky ridges and hillsides. The understorey within the Subject Land has a high percentage of exotic species and was assessed in moderate to low condition, which is also unfavourable habitat for this species. Based on the absence of preferred habitat, it was concluded that this species is unlikely to occur in the Subject Land and was therefore excluded from further assessment. Small Snake Orchid Potential habitat for this species within the Subject Land was assessed as degraded due to historical impacts associated with grazing and agriculture. Additional surveys for this species, in the form of targeted flora surveys to assess potential habitat, were completed within PCT 510 in October 2023. No potential habitat for this species was detected. With the undertaking of surveys in October 2023, the survey effort for this species has met the BAM requirements and therefore the species has been excluded as a candidate species.	Appendix E of the Amendment Report
BCS AA - 07	Biodiversity	5.1 Review the justifications for excluding candidate fauna species credit species from further assessment including bush stone-curlew, barking owl, powerful owl, masked owl and greyheaded flying fox. Conduct a targeted survey to determine presence or absence, obtain an expert report or assume presence for all species that cannot be excluded from the list of candidate species credit species.	Grey-headed Flying-fox The subject land was assessed as not containing preferred breeding habitat for this species, being permanent or temporary roosts. Breeding camps of grey-headed flying fox are readily observable and, therefore, if present would have been detectable during all survey events completed. No records or observations of this species were made. Since the presence of breeding camps would have been detectable during all survey events and given the lack of preferred breeding habitat for this species, it was excluded as a candidate species for the Project. Barking Owl, Powerful Owl and Masked Owl The Subject Land does not contain any of the required breeding habitat for these species and therefore the species has been excluded from assessment. Hollow-bearing trees recorded within the Project Area do not contain hollows greater than 20 cm, which is preferred for the Barking Owl.	Appendix E of the Amendment Report

Ref No.	Theme	Submission	Response	Where Addressed
			Bush-stone Curlew This species has been excluded from assessment due to an absence of required habitat features within the Subject Land. There was an observed lack of adequate fallen timber across most of the Subject Land. Areas that had fallen timber that may be foraging habitat for this species was assessed. However, in addition to fallen timber this species also requires leaf litter to be present in their foraging habitat. This was not observed within areas of fallen timber. For breeding habitat this species requires bare ground and grass below 15 cm (Treilibs, C 2006). The presence of this species is dictated by the presence of breeding habitat (regardless if foraging habitat is present). The Subject Land lacks habitat for this species – being only a small area with adequate fallen timber; however, this area was surrounded by over 15 cm tall grass, no bare ground or leaf litter were observed/recorded. Therefore, this species was excluded as a candidate species. Tusked Frog Survey effort for the Tusked Frog included assessments of farm dams to identify dams that contain appropriate habitat for this species – i.e., vegetation cover and hydrology to support Tusked Frog breeding. Broadly, preferred habitat for Tusked Frog includes rainforests, wet forests and flooded grassland and pasture, all of which are absent from the Subject Land. The quality and condition of farm dams was assessed to be low and generally unsuitable habitat. There was a lack required leaf litter cover and absence of coarse woody debris or dense vegetation cover required for this species for the deposition of eggs. Aural-visual frog surveys were conducted during Spring 2023 with optimal weather conditions (e.g., rain and thunderstorm events occurring during the survey event with 42mm measured across a 7-day period). In total 13 hours of transecting was undertaken by 2 ecologists. No individuals of this species were observed during survey.	
BCS AA - 08	Biodiversity	6.1 Provide evidence of the location and survey timing for each individual threatened flora species survey, including the location of their associated Plant Community Types (PCT).	Section 4.4.3 of the BDAR has been updated to include specific detail on the flora survey effort completed for each candidate species in each PCT across the development footprint. This includes a list of each of the candidate species, the associated PCTs for these species from Bionet and the survey effort completed in each relevant season.	Appendix E of the Amendment Report
BCS AA - 09	Biodiversity	7.1 Assess prescribed impacts to habitat connectivity on threatened species in accordance with section 8.3 of the BAM. Provide evidence of avoidance and minimisation measures that have been applied to reduce impacts to fauna connectivity.	As described in Section 7.3.1 of the BDAR, the proposed, amended layout allows for the retention of a connected corridor of native vegetation through the centre of the Subject Land, connecting large patches of native vegetation around the Oxley Highway in the north through to the Macdonald River in the South. The amended design has provided measures to avoid impacts to connectivity by retaining larger, intact patches of native vegetation in a connected corridor in a north-south direction through the Subject Land.	Appendix E of the Amendment Report
BCS AA - 10	Biodiversity	8.1 Provide a brief explanation of the survey timeline to explain why the survey methodology is not consistent with the new survey guides, and how the survey method and effort is consistent with previously accepted methods.	Section 4.4.2 and Section 4.4.3 of the updated BDAR includes additional detail on all survey events and how they were designed to achieve appropriate effort for each candidate species.	Appendix E of the Amendment Report
BCS AA - 11	Biodiversity	9.1 Review vegetation integrity plot data to ensure all data sources (BAM-C and BDAR) contain consistent information.	The vegetation integrity plot data presented in the BDAR has been reviewed and the BAM-C data checked for consistency.	Appendix E of the Amendment Report

TABLE 4-6 TRANSPORT FOR NSW (TFNSW)

Ref No.	Theme	Submission	Response	Where Addressed
TfNSW - 01	Traffic (OSOM vehicles)	The actual sizes and configurations of the OSOM vehicles need to be identified in order for TfNSW to make an assessment on whether the proposed vehicles can be accommodated on the state road network. TfNSW notes that on Pages 20-21 of the TIA, the applicant states that the exact transformer model and vehicle configuration is yet to be determined and that a vehicle configuration from another project has been used to undertake the required swept path analysis. However, without the exact size and configuration, TfNSW is unable to assess the operational and physical impacts and issues that will result from the proposed OSOM movements.	The largest component of the Project to be transport to the project site is the transformer. This will be transported from the Port of Melbourne. The vehicle configuration to transport the transformer would be a 14 x 8 Axle Platform Trailer. The Updated TIA provides the route assessment and discussion of OSOM movements for the 14 x 8 Axle Platform Trailer from Port of Melbourne. The assessment of the access route identified that no civil works will be required and the OSOM will be able to access the Project Area with suitable traffic management measures (refer Appendix E for the OSOM Route – Port of Melbourne, within Appendix L). For the OSOM vehicles that will deliver modular buildings from Port of Newcastle and Port of Brisbane, route assessment undertaken for other projects in the area (e.g., wind farms) using similar OSOM vehicle configurations to those to be used for the Project, indicate that those access routes can accommodate the OSOM vehicle movements (refer Section 4.2 of Updated TIA).	Appendix L of the Amendment Report
TfNSW - 02	Traffic (OSOM vehicles)	The swept path assessments will need to be re-undertaken using the largest OSOM vehicle that will be utilised.	A swept path assessment has been undertaken for the largest OSOM vehicle to be used for the Project, a 14 x 8 Axle Platform Trailer. This vehicle will transport the transformer from Port of Melbourne. As part of the access route assessment, 14 points of interest were identified, and a swept path assessment was undertaken for these locations along with the site access (refer Appendix E of Updated TIA). The assessment concluded that no civil works will be required and the largest OSOM vehicle can access the Project Area with suitable traffic management measures. The updated transport and access mitigation measures are summarised in Appendix B of the Amendment Report.	Appendix L of the Amendment Report
TfNSW - 03	Traffic (OSOM vehicles)	'Minor deliveries' from alternative ports as described on Page 44 of the EIS will need to be detailed if heavy or OSOM vehicles are involved.	The route assessment and discussion of OSOM movements for Project elements delivered from alternative ports, including Port of Newcastle, Port of Brisbane and Port of Melbourne have been assessed for the amended Project as described in Section 4.2 of Updated TIA. Refer to Ref No. TfNSW - 01.	Appendix L of the Amendment Report
TfNSW - 04	Traffic (Staff transportation)	The TIA identifies that most of the workforce during will be required to be transported to site via shuttle buses and carpooling to be able to achieve the light vehicle assumptions identified within the TIA. No measures/protocols/procedures have been provided within the TIA to identify how compliance with the shuttle buses and carpooling numbers will be practicably achieved, monitored and enforced. At this point the carpooling and shuttle bus as a method for reducing the light vehicle numbers is not considered viable. The TIA must be revised to either: Address the above point to provide the requisite measures/protocols/procedures to justify how the carpooling and shuttle bus will be practicably achieved, enforced, monitored to achieve compliance with the traffic generation assumptions, or TfNSW requests the TIA and the traffic modelling (SIDRA modelling for the New England Highway/Oxley Highway intersection and the turn warrants assessment for the Oxley Highway/site access) be updated to account for the most conservative scenario with one worker per vehicle at the AM/PM peak during peak of construction. The SIDRA files will need to be forwarded to TfNSW as a part of the RTS submission.	A meeting was held with TfNSW on 13 November 2023 to discuss shuttle bus and carpooling assessment approach. The Updated TIA has addressed carpooling and shuttle bus enforcement and updated SIDRA modelling for the New England Highway / Oxley Highway intersection and the turn warrants assessment for the Oxley Highway / site access. A conservative vehicle occupancy of 1.2 people per car has been adopted under the assumption that staff carpooling is encouraged. SIDRA modelling results showed that all intersections during the morning and evening peaks are expected to continue to operate with good levels of service (LOS A). All SIDRA modelling results are provided within Appendix C of the Updated TIA. To maintain the number of worker-related vehicle movements (light vehicles and shuttle buses) arriving/departing the Project Area at or below the expected 94 movements per day (as estimated in the TIA, Appendix L, Section 3.1.1), the following recommendations will be adopted by the Applicant and the nominated construction contractor during the construction phase of the Project: - The nominated construction contractor will provide shuttle bus services for construction workers arriving and departing the Project Area; - The bus will service the key townships where the construction workers live (Tamworth, Armidale and Uralla); - Shuttle bus hubs will be established at these key townships, to transport workers to and from Project Area. Hubs will include public parking lots such as Riverside Park carpark in Tamworth (Plain/Carter Street, Taminda); and - Provide minimal or restricted on-site parking to discourage workers arriving to and departing from the Project Area via private vehicles.	Appendix L of the Amendment Report

Ref No.	Theme	Submission	Response	Where Addressed
			These measures will be outlined in detail within a detailed Construction Traffic Management Plan (CTMP) to be developed in close consultation with the relevant Local Authorities (including Tamworth Regional Council and TfNSW) and stakeholders.	
TfNSW - 05	Traffic (OSOM vehicles)	A section of the Oxley Highway to the east of the subject site between Yarrowitch and Wauchope is not approved for heavy vehicles. TfNSW notes that OSOM vehicles will be utilising the New England Highway and will therefore be approaching the development from the west. The TIA is required to be amended to address how OSOM vehicles will achieve approval for heavy vehicle access or provide an alternative route that is approved for heavy vehicles.	Most heavy vehicles required to transport plant and equipment to the Project site will originate from Port of Newcastle or Port of Brisbane. At least one component, the transformers, may originate from the Port of Melbourne. A review of the potential access routes from these ports shows that no heavy vehicles or OSOM vehicles will travel between Yarrowitch and Wauchope, or along Oxley Highway east of the Project (refer Section 4.1 of Updated TIA). OSOM vehicles are subject to specific road permits that will be applied for and obtained by the transport contractor prior to construction (refer Section 4.2 of Updated TIA). The Updated TIA concludes that the state roads along the proposed access routes can accommodate the heavy and OSOM vehicle movements expected to be generated during construction of the Project.	Appendix L of the Amendment Report
TfNSW - 06	Traffic (Modelling)	The TIA does not identify the background growth rate of traffic volumes on the New England Highway and Oxley Highway. Also, there is no indication that a growth rate has been applied to the background traffic data in the SIDRA modelling or the turn warrants analysis. The TIA and traffic modelling will need to include background growth in projected traffic volumes because construction will not begin until Q2 2024 and will continue until late 2025.	Existing surveyed traffic volumes at the intersection of New England Highway and Oxley Highway have been adjusted to include a 1.5% compounding annual growth, as provided by TfNSW, for a period of 2 years to reflect the end of the construction period in 2025 (refer Appendix A of Updated TIA). The adjusted existing surveyed traffic volumes were considered in the SIDRA analysis for the morning and evening peak hour along with the Project's Construction traffic volumes (refer Appendix D of Updated TIA). The revised SIDRA analysis indicates that the intersection is expected to operate with similar operating conditions to the peak construction hour and the intersection is expected to continue to operate with good level of service (LOS A). Therefore, the road network can accommodate the traffic generated by the Project during the road network peak hour. An additional traffic survey (tube count) was undertaken at the location of the proposed site access to the Oxley Highway to determine the existing road environment. The survey has been adjusted by a 1.5% compounding annual growth rate. The tube count was considered in the assessment undertaken for the intersection of Oxley Highway and the site access during the peak traffic generation hour for the Project, which occurs when workforce access the Project from 6:00am to 7:00am. Based on the assessment, the intersection would operate in a safe manner with the provision of a Basic Right Turn (BAR) treatment.	Appendix L of the Amendment Report
TfNSW - 07	Cumulative Impact (Traffic)	How accumulative traffic from nearby projects has been factored into the background traffic for the assessment is unclear. The TIA needs to be updated to identify the projects and traffic volumes, ideally in a table, that were used to calculate the background traffic volumes for the Oxley Highway.	Based on the information available, a breakdown of the cumulative traffic volumes from each project with a potential to generate additional vehicle movements along New England Highway and Oxley Highway within the vicinity of the Project is provided in Appendix C of Updated TIA. The cumulative traffic movements are provided for both the AM and PM construction peak hour, at 6:00am and 5:00pm. These have been considered in the SIDRA analysis (refer Appendix D of Updated TIA.).	Appendix L of the Amendment Report
TfNSW - 08	Traffic (Existing traffic volumes)	The location of the traffic survey was undertaken at the New England Highway/Oxley Highway and not at the location of the proposed access to the Oxley Highway, which does not provide an accurate representation of the background traffic at the proposed access to the Oxley Highway. A further traffic survey at the location of the proposed access to the Oxley Highway is required to be prepared in accordance with Part 3 of Austroads Guide to Road Design. The TIA will be required to be amended based on the outcomes of the revised traffic survey, with the supporting raw data for the traffic survey to be provided as an appendix within the revised TIA.	Refer to Ref No. TfNSW - 06. The Updated TIA has been amended based on the outcomes of the additional tube count along Oxley Highway at the site frontage. The survey was undertaken from Friday 3 November to Friday 10 November 2023 and is provided in Appendix B of Updated TIA.	Appendix L of the Amendment Report

Ref No.	Theme	Submission	Response	Where Addressed
TfNSW - 09	Traffic (Site access)	A revised turn warrants assessment will be required to account for the background growth and accumulative traffic occurring at the AM/PM peak of the project during peak of construction. The turn warrants assessment should account for the peak period for the background traffic and the peak period for the construction traffic. Therefore, there will need to be two assessments in order to ascertain the appropriate treatment for the site access.	Turn warrants assessments have been undertaken for the intersection of New England Highway and Oxley Highway and for the site access (refer Section 5.1 of Updated TIA). These assessments have considered a 1.5% annual growth rate, summarised as follows: - Intersection of New England Highway and Oxley Highway: - The peak period for the background traffic indicates it occurs between 8:15am and 9:15am (refer Appendix A of Updated TIA) - The peak period for the Project construction traffic occurs when staff access the site from 6:00am to 7:00am. - Both assessments indicate the intersection would require a Basic Left Turn (BAL) and a Channelised Right Turn (CHR) treatments; however, these are already provided, therefore no intersection upgrades are required. - Oxley Highway and the site access: - The peak period for the background traffic indicates it occurs between 8:00am and 9:00am (refer Appendix B of Updated TIA). - The peak period for the Project construction traffic occurs when staff access the site from 6:00am to 7:00am. - Both assessments indicate that a BAR turn treatment will be required at the site access to be operated in a safe manner.	Appendix L of the Amendment Report
TfNSW - 10	Traffic (Site access)	The Safe Intersection Sight Distance (SISD) assessment for the proposed site access from Oxley Highway in Appendix F shows that there is 285m of sight distance available. Under Table 3.2 of Austroads Guide to Road Design Part 4A, this would be adequate if a reaction time of 2.0 seconds is assumed. However, TfNSW requires the application of the 2.5 second reaction time based on a design speed of 110km/h (100km/h posted speed limit + 10km/h) which requires 300m of SISD to be provided in each direction at the intersection. The TIA is required to be updated to provide a figure identifying how the required 300m of SISD is achieved in each direction at the proposed access to the Oxley Highway.	The SISD assessment has been updated to show 300 m of sight distance in each direction based on a 2.5 second reaction time, as provided in Appendix H of Updated TIA. The revised SISD shows that given the relatively flat and straight alignment of the road network the available sight distance at the intersection of Oxley Highway and the site access exceeds the requirements of the Austroads Guide to Road Design Part 4A. Thus, vehicles can safely enter the Oxley Highway from the site access.	Appendix L of the Amendment Report
TfNSW - 11	Traffic (Site access)	There is an existing track that can be accessed from Oxley Highway in the northwest corner of the site. This track will need to be physically closed off.	The existing track off Oxley Highway, located approximately 2 km west of Project site access, may only be used for emergency purposes. There will be no pedestrian and/or vehicles access from this existing track during construction works. The existing gate will be locked at the commencement of the Project. This gate will remain once Project is constructed for security purposes and as required for emergency response. Site management documentation during Construction and Operation, such as the Project specific emergency management plan, will identify this location as 'emergency access only'. There will be no internal tracks leading to this access point during Operation which will deter any use, except in the case of emergency. The Project description has been amended to provide detail on existing track use and management, refer to Amendment Report Appendix A.	Appendix A of the Amendment Report
TfNSW - 12	Traffic (Site access)	The Strategic Design provided within Appendix D of the TIA identifies a BAR and assumes that the minimal left turn movements can be safely undertaken within the high-speed environment and therefore does not require the provision of a BAL. The TIA has not sited justification for how the left turn into the site will be undertaken safely within the high-speed environment. To assess the revised scope for the provision of only a right turn intersection treatment, TfNSW would require the prohibition of the left turn movements into the site access from the Oxley Highway. The TIA must be amended to identify how the left turn movements will be prohibited through either practicable and enforceable traffic mitigation measures; or Through the provision of physical treatments to prohibit the left turn movements into the access. The turn warrants assessment will be required to be reassessed based on the above matters identified within this letter and inclusive of the change turning movements due to the prohibition of the left turn into the site. The strategic design is required to be revised based on the matters identified within this letter and the outcome of the prohibition of the left turn.	Vehicle movements associated with the Project are as follows: All heavy vehicle movements are to arrive from the west of Oxley Highway. Vehicles transporting materials will be sourced from nearby regional centres including Tamworth, Kootingal, Moonbi, Nemingha, Uralla and Armidale, all of which are accessed via New England Highway to the west. Walcha is the only township located to the east within a two-hour drive. However, this township is not considered as a workforce source nor an appropriate place of workforce accommodation. Additionally, Oxley Highway has a speed limit of 100 km per hour (km/hr), a design speed of 110km/hr has been adopted which requires a Safe Intersection Sight Distance (SISD) of 300 m based on a 2.5 second reaction time. The SISD assessment has been updated to show 300 m of sight distance is available in each direction of the site access (refer Appendix G of Updated TIA). The assessment shows that the site access location has an adequate sight distance for following vehicles to see a vehicle coming from the east of Oxley Highway and turning into the site. Therefore, the proposed access arrangements for the site access are considered acceptable.	Appendix L of the Amendment Report

Ref No.	Theme	Submission	Response	Where Addressed
TfNSW - 13	Traffic (Site access)	The Strategic Design provided within Appendix D of the TIA identifies that the storage length has been based on one 19m design vehicle while the swept paths have been prepared on a 25m B-double as the design vehicle. The strategic design and potentially the swept paths are required to be amended to reflect the correct design vehicle and associated storage length.	The design for the site access has been updated to reflect a storage length of 25/26 metres based on a B-Double vehicle (refer Appendix F of Updated TIA).	Appendix L of the Amendment Report
TfNSW - 14	Traffic (OSOM vehicles)	The swept paths provided within Appendix E sheet 08 identifies the design vehicle (25m B-double) propped at the hold line of the proposed intersection while the design vehicle turns left into the access from the Oxley Highway, which is intended to represent that simultaneous manoeuvring of the design vehicle at the proposed intersection. The swept paths must be revised to demonstrate that the design vehicle can pass simultaneously without conflict when entering and egressing the access via the Oxley Highway in an east and westbound direction.	The swept path assessment has been updated to show simultaneous turning manoeuvres in and out of the site access (refer Appendix G of Updated TIA). The assessment demonstrates that the 25m B-double vehicle can simultaneously turn to and from Oxley Highway with the inclusion of the proposed BAR turn treatment. Therefore, the Updated TIA concludes that the site access has been suitably designed and is able to accommodate the vehicles expected to access the site.	Appendix L of the Amendment Report

TABLE 4-7 FIRE AND RESCUE NSW (FRNSW)

Ref No.	Theme	Submission	Response	Where Addressed
FRNSW - 01	Preliminary Hazard Analysis (Fire Hazards)	It has been the experience of FRNSW that BESS facilities pose special problems of firefighting and special hazards exist that may require additional fire safety and management measures. Due to these unique challenges FRNSW make the following recommendations: 1. That a comprehensive Fire Safety Study (FSS) is developed. The FSS is to be developed in accordance with the requirements of Hazardous Industry Planning Advisory Paper (HIPAP) No.21 and is to meet the operational requirements of FRNSW. 2. That the development of the FSS consider the operational capability of local fire agencies and the need for the facility to achieve an adequate level of on-site fire and life safety independence. The FSS should be prepared consistent with the FRNSW Fire Safety Guideline Technical Information – Large scale external lithium-ion battery energy storage systems – Fire safety study considerations. 3. That the FSS be submitted, reviewed, and meet the operational requirements of FRNSW prior to any further submission being made to FRNSW; this includes: an Initial Fire Safety Report (IFSR) and / or Performance-Based Design Brief / Fire Engineering Brief Questionnaire (FEBQ). 4. That the development of a FSS be a condition of consent.	Noted. The Applicant is committed to addressing all requirements of the condition of consent, which may involve developing a FSS, including an IFSR and / or Performance-Based Design Brief / FEBQ.	In this table
FRNSW - 02	Preliminary Hazard Analysis (Fire Hazards)	5. That a comprehensive Emergency Management Plan (EMP) is developed for the site in accordance with HIPAP No.1.3 The findings of the FSS should inform the development and content of the EMP.	Noted. The Applicant is committed to developing a Bush Fire Emergency Management and Operations Plan, as discussed in Chapter 4 of the Bush Fire Assessment Report (refer Appendix Q of the EIS).	Appendix Q of the EIS
FRNSW - 03	Preliminary Hazard Analysis (Fire Hazards)	6. That an Emergency Services Information Package (ESIP) be prepared in accordance with FRNSW fire safety guideline – Emergency services information package and tactical fire plans.	Noted. The Applicant is committed to addressing all requirements of the condition of consent, which may include developing an ESIP.	In this table
FRNSW - 04	Preliminary Hazard Analysis (Fire Hazards)	7. An Emergency Responders Induction Package is developed for the site in consultation with, and to the satisfaction of FRNSW prior to commissioning of the site. The package should inform first responders of site-specific features and safety measures to ensure they are able to undertake their duties effectively in accordance with agency specific Standard Operational Guidelines. The format of the Induction Package should be such that it can be readily shared across all agencies.	Noted. The Applicant is committed to addressing all requirements of the condition of consent, which may include developing an Emergency Responders Induction Package prior to commissioning.	In this table

TABLE 4-8 NEW SOUTH WALES RURAL FIRE SERVICE (NSW RFS)

Ref No.	Theme	Submission	Response	Where Addressed
NSW RFS - 01	Preliminary Hazard Analysis (Fire Hazards)	The NSW RFS recommends the following conditions be included in any approval granted: 1. A Fire Management Plan (FMP) shall be prepared for the Solar Array and Battery Energy Storage System (BESS) development, The FMP shall be prepared in consultation with NSW RFS Tamworth Fire Control Centre. The FMP shall include: • 24 hour emergency contact details including alternative telephone contact; • Site infrastructure plan; • Fire fighting operations plan including ◦ methods and resources to manage and extinguish Lithium Battery Fires.	Noted. The Applicant is committed to developing a Bush Fire Emergency Management and Operations Plan including the recommendations discussed in Chapter 4 of the Bush Fire Assessment Report (refer Appendix Q of the EIS). This plan will be developed in consultation with key stakeholders, including the NSW RFS Tamworth Fire Control Plan.	Appendix Q of the EIS
NSW RFS - 02	Preliminary Hazard Analysis (Fire Hazards)	2. The development footprint is to be managed as an Asset Protection Zone in accordance with Appendix 4 of 'Planning for Bush Fire Protection 2019'.	Noted. All land associated with the Asset Protection Zone (APZ) of the Project Area will be managed in accordance with the requirements of Asset Protection Zone Standards - Appendix 4 of 'Planning for Bush Fire Protection 2019' (PBP).	Appendix Q of the EIS
NSW RFS - 03	Preliminary Hazard Analysis (Fire Hazards)	3. A minimum 10,000 litre water supply (tank) fitted with a 65mm storz fitting shall be located adjoining the internal property access road within the required APZ.	Two static water tanks with a capacity of 100 kL each will be provided adjacent to the O&M facility and the internal road (refer Figure 1-2). Both tanks will be fitted with a 65mm storz fitting.	In this table
NSW RFS - 04	Preliminary Hazard Analysis (Fire Hazards)	4. To allow for emergency service personnel to undertake property protection activities, a 10 metre defendable space (APZ) that permits unobstructed vehicle access is to be provided around the perimeter of the development footprint including the BESS and associated infrastructure.	An APZ of minimum 10 m will be provided and maintained between all vegetation and solar farm infrastructure within the Disturbance Footprint.	Appendix N of the Amendment Report

TABLE 4-9 DEPARTMENT OF REGIONAL NSW - MINING, EXPLORATION & GEOSCIENCE (MEG) – GEOLOGICAL SURVEY OF NSW (GSNSW)

Ref No.	Theme	Submission	Response	Where Addressed
GSNSW - 01	Land use	MEG-GSNSW has reviewed the Environmental Impact Statement for the Bendemeer Solar Farm and has no concerns to raise regarding potential sterilisation or access to mineral or extractive resources.	Noted.	This table.

TABLE 4-10 TAMWORTH REGIONAL COUNCIL (TRC)

Ref No.	Theme	Submission	Response	Where Addressed
TRC - 01	Landscape and Visual	It is noted that the Landscape and Visual Impact Assessment (LVIA) Report found that the Project will have low visual impact on non-associated dwellings and public viewpoints. In this regard, the Project would not require mitigation. Nonetheless, mitigation measures have been recommended in the Report to limit the visual impact from the Project. Such mitigation measures include but are not limited to the retention of existing vegetation and new supplementary planting, as shown on the Draft Landscape Plan in Appendix E of the Report. Council supports the identified mitigation measures.	Mitigation measures will be adopted to limit the visual impact from the Project, as shown in detail in Appendix E of the LVIA and summarised in Appendix B of the Amendment Report.	Appendix B of the Amendment Report
TRC - 02	Landscape and Visual	It is noted that the Project will have no glare impacts under Operational Scenario 3 in the LVIA Report and the Applicant is committed to this scenario as a mitigation measure. This approach is supported by Council.	Noted. Revised mitigation scenarios resulted in Operational Scenario 2 to be implemented by the Project as a mitigation measure.	Appendix B of the Amendment Report
TRC - 03	Traffic	Council has reviewed the Traffic Impact Assessment (TIA) for this development noting that there was some consultation with TRC officers prior to this TIA being available. Proposed access routes, whether from Brisbane in the north or Newcastle in the south, are primarily via the State Road network. The proposed site access is directly off Oxley Highway, with a recommendation for the construction of a BAR treatment, with the vast majority of movements into the site coming from the west. The TIA has concluded that the existing road network has the capacity to cater for the projected project traffic without the need for any other upgrades. It is noted that the intersection of Oxley Highway with New England Highway may benefit from the addition of a left-turn slip lane off the New England Highway if	The Applicant has engaged with TfNSW to discuss requirements of treatments at intersections of Oxley Highway with New England Highway and at the site access with Oxley Highway. Detail of engagement is provided in Section 3.1. The required turn treatment to cater for the additional traffic from the Project is based on the <i>Austrroads Guide to Traffic Management Part 6: Intersections, Interchanges and Crossings</i> and considers the existing traffic conditions to warrant requirements.	Appendix L of the Amendment Report

Ref No.	Theme	Submission	Response	Where Addressed
		project components are to be transported from Brisbane, especially given the 100kph speed zone. It is acknowledged that this matter is ultimately the domain of Transport for NSW.	As concluded in the Updated TIA, the Project will require treatment to cater for the left turn traffic from the north in the form of a Basic Left Turn (BAL) which is provided as part of the existing intersection.	
TRC - 04	Traffic	The TIA expresses an expectation that transport of the majority of staff and workers to site will be via shuttle buses. The strengthening of this expectation, possibly by way of an extension to the Workforce Accommodation Strategy (WAS) is strongly recommended, especially in the context of cumulative impacts on the region's transport networks and housing supply.	Shuttle bus use will be encouraged for the workforce as described in the following recommendations from the Updated TIA (Appendix L of the Amendment Report) and will be adopted by the Applicant and the nominated construction contractor during the construction phase of the Project: • The nominated construction contractor will provide shuttle bus services for construction workers arriving and departing the Project Area; • The bus will service the key townships where the construction workers live (Tamworth, Armidale and Uralla); • Shuttle bus hubs will be established at these key townships, to transport workers to and from Project Area. Hubs will include public parking lots such as Riverside Park carpark in Tamworth (Plain/Carter Street, Taminda); and • Provide minimal or restricted on-site parking to discourage workers arriving to and departing from the Project Area via private vehicles. These measures will be outlined in detail within a detailed Construction Traffic Management Plan (CTMP) to be developed in close consultation with Tamworth Regional Council and TfNSW and other relevant stakeholders. A WAS will be developed and implemented for the Project which will include measures to explore available accommodation options in Tamworth, Uralla and Armidale. The extent of this measure is detailed in the Updated SIA (Appendix P of the Amendment Report) which proposes the following: • Explore available accommodation options in Tamworth, Uralla and Armidale; • Prioritise local accommodation options, where available; • Investigate local and regional community social media options to disseminate information to local accommodation operators and rental property owners, such as construction timing, workforce estimates and accommodation requirements; • Require ongoing contact with local accommodation operators to provide Project information such as construction timing, workforce estimates and accommodation requirements; • Provide a register of local accommodation options and contact details to contractors and subcontractors; • Provide and maintain register of local property owners who have expressed interest in offering dwellings for rent, with the intent to provide to the EPC Contractors and subcontractors; • Include a requirement to review workforce predictions during construction to ensure that accommodation requirements are met; • Identify any overlaps with peak demand periods for accommodation and engage with key stakeholders; and • Stipulate ongoing consultation with local property owners and accommodation providers to manage occupancy and maximise use of local accommodation, without preventing its use for major event and holiday purposes.	Appendix L and Appendix P of the Amendment Report
TRC - 05	Traffic	Council notes the potential for the solar panels and associated infrastructure to be transported by rail i.e., via the Rail Intermodal Site at the Tamworth Global Gateway Park. If this is an option, most of the transport burden will be removed from the State Road network, but it will be necessary to provide detail in respect of the road transport options between the intermodal and the development site.	The Applicant is considering the use of rail for project components transportation, but this option has yet to be explored in-depth. The Updated TIA concluded that the proposed construction traffic generated by the Project is expected to be minimal, and modelling indicated that the existing road network is able to support good levels of service throughout the Project life. Should rail transport be considered at a later stage, detailed options would be explored in consultation with TRC between the intermodal and Project Area.	Appendix L of the Amendment Report

Ref No.	Theme	Submission	Response	Where Addressed
TRC - 06	Biodiversity	Council does not support the removal of the EPBC Act listed box gum woodland Threatened Ecological Community in order to accommodate the Project. However, if clearing is absolutely unavoidable, the Applicant must be required to provide options for local offsets and the re-establishment of native vegetation connectivity to form biodiversity corridors.	There is a potential that with the loss of EPBC Act listed Box Gum Woodland TEC, fauna movement within the Project Area may reduce. However, this is potentially only during the construction phase. A large corridor of connectivity has been retained within the centre of the Project Area to retain mobility between the habitat throughout and outside of the Project Area. Fauna are still likely to be able to utilise this habitat during operations. As per the BAM (2020), offset obligations on freehold land to be developed as a SSD will be addressed through the NSW Biodiversity Offset Scheme which includes the EPBC Act listed quantity of Box Gum Woodland within the Project Area. The Applicant has committed to the biodiversity offset credits as assessed by the DPPI BAM Calculator.	Appendix E of the Amendment Report
TRC - 07	Historic Heritage	It is noted that a Statement of Heritage Impact (SHI) has been prepared by consultants OzArk in relation to the proposal, in addition to the LVIA report prepared by Moir. Bendemeer Station is located 760m west of the subject site. The station is a listed heritage item under the Tamworth Regional Local Environmental Plan 2010. Elements of its heritage significance, which have the potential to be impacted by the proposal, relate to the site's ability to demonstrate pastoral development.	The heritage listed item 'Bendemeer Station' is located approximately 760 m west of the Project Area, with the Macdonald River separating the Project from Bendemeer Station. The Macdonald River is lined with dense vegetation and the surrounding land has moderately undulating slopes. Given the distance to the Project Area, topographic and natural visual barriers that exist between the Project Area and Bendemeer Station, the Statement of Heritage Impact (SOHI) has determined that the Project will not directly or indirectly impact 'Bendemeer Station' (refer Section 6.2 of the SOHI).	Appendix G of the Amendment Report
TRC - 08	Historic Heritage	The SHI identifies a small dilapidated former woodshed and stock yard on site. It is agreed that this building is not of local heritage significance.	Noted. The SOHI has identified the site Riverside-HS01, a shearing shed and stock yard, within the Project Area. The site has been assessed as having no historic heritage significance under the current Heritage NSW guidelines and the Burra Charter (refer Section 5.2 of the SOHI).	Appendix G of the Amendment Report
TRC - 09	Landscape and Visual / Historic Heritage	The LVIA notes that Bendemeer Station is separated from the proposed development by low sloping hills and vegetation along the MacDonald River. The LVIA considers that the potential impact from the development on the station is low. It is however noted that access to the site was not granted and as such, impacts were assessed remotely and digitally. The LVIA report considers that up to 25% of the project may be visible from this location. Bendemeer Station was assessed to have moderate scenic quality with high visual sensitivity. Enclosed is an extract from the State Heritage Inventory showing four (4) items from the Bendemeer Station. It is considered necessary that the Applicant provide more information regarding these locations and view sheds which show the exact area from which the quoted 25% of the project would be visible. The significance of the site relates to its pastoral development and, as such, the integrity of landscapes and vistas clearly forms part of this interpretation and needs to be addressed.	Further visual impact assessment was undertaken for Bendemeer Station, which includes the entirety of the item I096 (Schedule 5 of Tamworth Regional Local Environmental Plan (LEP) 2010) shown in Figure 01 of the Bendemeer Station Memo (Appendix D of the Addendum to LVIA). Item I096 is described as "Bendemeer" Station, "Bendemeer" Station Graves and "Bendemeer" Station Woolshed'. The State Heritage Inventory (SHI) also lists the "Bendemeer Station – Blacksmiths Store" within the curtilage of I096 however this component is not listed in Schedule 5 of the LEP. It is noted that the original homestead of item I096 no longer exists and stated in the SHI that this reduces the significance of the site. The Zone of Visual Influence (ZVI) representing a theoretical worst-case scenario (based on topography alone and bare ground scenario), shows that up to 25% of the Project may be visible from item I096 (refer Appendix I of the Amendment Report / Appendix K of the EIS). The curtilage for I096 is located 760 m west of the Project Area. Within this lot, three (3) buildings were identified for potential assessment: R394, R395 and R400. R394 was selected as the worst-case location to conduct further visual assessment as it is situated at the highest elevation of the three (3) buildings. As part of the detailed assessment for R394, both a wireframe and photomontage were prepared. The assessment of these in accordance with the Large-Scale Solar Energy Guidelines resulted in a 'low' visual impact rating due to the existing topography and vegetation, and distance to the Project.	Appendix D of the Addendum to LVIA Appendix I of the Amendment Report

Ref No.	Theme	Submission	Response	Where Addressed
TRC - 10	Water Resources, Hydrology and Flooding	Consideration should be given to the potential operational water demands of the Project in regard to dust suppression for any unsealed internal access roads and the ongoing maintenance of the supplementary planting. Further, if Agrisolar activities are implemented as a mitigation measure for the Project, the water supply needs of sheep on the solar farm should be addressed.	Operational water demand was discussed in Section 6.8.3 of the EIS as well as the amended Project description available at Appendix A of the Amendment Report. The amended Project layout has allowed for the retention of existing farm dams within the Project Area. Water required for dust suppression during operations is anticipated to be minimal due to its sporadic use compared to its regular use for PV module cleaning (also assessed to be of minimal impact). Watering regimes of supplementary plantings would be species-specific and may be regular during their installation; however, this is expected to taper off as the plantings establish during operation. Monitoring measures in the Addendum LVIA and Updated SIA will also inform whether water use for plantings requires further action based on visual and social performance respectively. Water required for agrisolar activities will be sourced from these existing dams and/or new on-site dams, existing and/or new livestock troughs connected to surface water pumps, groundwater bores (subject to seasonal availability and water licence permissions) or from an offsite local source from an approved facility. No water network upgrade will be required, and no impacts are anticipated on the availability of current surface or groundwater resources used by local landholders. A description of sheep stocking rates and water supply needs will be developed with the farm manager and included in a Grazing Management Plan.	Appendix B and Appendix J of the Amendment Report
TRC - 11	Water Resources, Hydrology and Flooding	Council has reviewed the Flood Impact Assessment (FIA) for this development. The FIA projects varying post development responses to rainfall events, dependent upon the subcatchment characteristics and the storm duration / exceedance probability. The responses range from slight decreases in peak flows through to increases in the order of 20% or more. The FIA concludes that the Project does not cause significant adverse impact on downstream properties. At the same time, the FIA does nominate that mitigation measures and the specifics around conveyance systems be addressed at the detailed design phase. TRC supports this approach, with specific attention to be paid to: • The likely decrease in runoff times as a result of stormwater being captured and conveyed in the (yet to be designed) internal access tracks and associated swale drains, and; • Mitigation that may be provided through the installation of on-site detention storage – particularly on the context of culvert crossings and the like immediately outside the site boundaries.	Noted. Mitigation measures as recommended in the FIA will be adopted by the Project.	Appendix K of the Amendment Report
TRC - 12	Water Resources, Hydrology and Flooding	The FIA forecasts the likely removal of existing dams and small gullies as a consequence of localised regrading of the site to accommodate the solar arrays. If Agrisolar activities are implemented (as noted above), consideration should be given to providing permanent water storage elements within any detention systems for stock watering purposes.	As outlined in the Updated SAIA, farm dams will be retained and maintained to accommodate agrisolar. A series of troughs are also present onsite which would be available for use during operations. Additional water required for agrisolar may be supplied by new on-site dams, additional troughs connected to surface water pumps or groundwater bores (subject to seasonal availability and water licence permissions) or alternatively from an offsite local source from an approved facility. Water supply options for the Project are outlined in further detail in the amended Project Description included in the Amendment Report. Two water tanks with storage of approximately 100 kL will be included adjacent to the O&M facility for the purposes of construction and operations/maintenance of the Project and for bushfire protection. Given the demand for water will be significant less during operations/maintenance than during construction, this tank may be used as a reserve water supply option for livestock. A description of sheep stocking rates and required stock watering will be developed with the farm manager and included in a Grazing Management Plan.	Appendix A of the Amendment Report

Ref No.	Theme	Submission	Response	Where Addressed
TRC - 13	Soils and Agriculture	The Applicant has indicated a commitment to prepare a Soil and Water Management Plan (SWMP) in accordance with the 'Blue Book' Volume 1 Managing Urban Stormwater: Soils and Construction (Landcom 2004). Council stresses the importance of managing stormwater and soils to prevent offsite impacts and recommends the Applicant to look at synergies between managing the groundcover and stormwater runoff.	A SWMP will be prepared for the Project and will consider synergies between managing the groundcover and stormwater runoff. The mitigation measures to be adopted by the Project are summarised in Appendix B of the Amendment Report	Appendix B of the Amendment Report
TRC - 14	Waste Management	The EIS commits to a detailed Waste Management Plan. Council agrees this is necessary this but wishes to comment on the timing. A detailed plan for managing the waste material during the construction phase needs to be developed in consultation with TRC prior to construction. The Waste Management Plan must include options for diverting recoverable or recyclable waste streams from landfill, including recoverable or recyclable options that are outside of the Tamworth Local Government Area. It also needs to detail all types of packaging and material from the construction phase. A condition requiring that the construction phase of the Waste Management Plan be approved prior to construction commencing is recommended.	Noted. A Waste Management Plan (WMP) will be developed incorporating options for waste diversion from landfill and detailing the waste streams during construction of the Project. The WMP will be prepared in consultation with TRC prior to construction.	Appendix B of the Amendment Report
TRC - 15	Waste Management	Further details of decommissioning must be provided and a requirement that information regarding decommissioning be updated during the life of the project be included in the conditions of any consent.	Noted. The Applicant is committed to addressing all requirements of the condition of consent.	In this table
TRC - 16	Waste Management	The Environmental Protection Licence (EPL) for Council's Forest Road landfill allows 60,000 tonnes per annum to be accepted. There is limited capacity for additional waste volumes, such as in the event of a disaster occurring requiring large volumes being disposed of to landfill or a one-off decommissioning of a large renewable energy project. Therefore, it is important for the Applicant to provide projected waste volumes in order for TRC to be able to manage it, especially with cumulative volumes from other proposed renewable energy projects. If volumes are predicted to exceed the EPL threshold, then Council would need to examine whether an EPL amendment is an option or whether Athena Energy Australia (Holdings) Pty Ltd or the Applicant needs to find an alternative solution.	The Applicant is committed to providing projected waste volumes for decommissioning of the Project, to be included in the Decommissioning Plan, or similar.	Appendix B of the Amendment Report
TRC - 17	Decommissioning	Council seeks assurances, through conditions imposed on any approval, that it will not be left with any liability if the Project is not decommissioned as planned. For example, if the Project goes into a period of care and maintenance indefinitely. The preferred option is a bond for decommissioning that is established prior to the commencement of any works. Another option could be a restriction on title for the decommissioning of the solar farm. Whilst it is acknowledged that the Project is on freehold land, given the large area and high cost, it is outside the purview of the Project to warrant that the current or future landholders have capacity to decommission an abandoned solar farm. Additional information on contingencies with the landholder undertaking the decommissioning would need to be included upfront in a Decommissioning Plan.	Currently, the Applicant has a private agreement in place with the host landowner regarding decommissioning. A Decommissioning and Rehabilitation Plan (DRP) will be prepared as part of the post approval requirements. In addition to fulfilling the legal obligation for all solar developers to cover decommissioning costs, this DRP will mitigate any potential liabilities for the landowner, local Council or State Government. The Applicant acknowledges that a Solar Energy Decommissioning Calculator is proposed to integrate with the Large-Scale Solar Energy Guideline as part of the NSW DPHI Draft Energy Policy Framework (NSW DPE, 2023) which was exhibited from 14 November 2023 and 29 January 2024. This would function to quantify and estimate potential costs for developers and landowners to transparently gauge efficacy of the decommissioning phase as part of the Large-Scale Solar Energy Guideline.	Appendix B of the Amendment Report
TRC - 18	Contributions and Agreements	TRC is supportive of a Voluntary Planning Agreement (VPA) for the Project to ensure there are local benefits as a result of the Project. TRC has recently adopted the following policy for VPAs for renewable energy projects: - The Applicant enters into a VPA consisting of a lump sum of 1.5% of capital value (adjusted annually for CPI), 50% of which is to be paid to Council on commencement of construction and the remainder to be paid on an annual basis for the life of the development; - This payment be additional to any agreed community benefit sharing arrangement such as a community enhancement fund; and - Council's preference is that any Community Enhancement Fund (and the like) be administered by a philanthropic Community Benefit Fund provider rather than Council, with Council holding a role as member.	The Applicant has presented revised VPA Terms of Reference which align with TRC's December 2023 policy. The revised terms include two primary contribution streams: - Upfront and annual contributions based on a percentage of CIV provided directly into a new VPA fund managed by TRC. Funds are to be reported in TRC's development contributions register; and - The Bendemeer Community Benefit Fund to be managed by a philanthropic committee of local community members. Contributions at a rate of \$250/MW of registered generation capacity will be provided on an annual basis from construction commencement through to end of decommissioning.	In this table. Section 3.9 of EIS

Ref No.	Theme	Submission	Response	Where Addressed
TRC - 19	Contributions and Agreements	The EIS commits to continued consultation with the Applicant and TRC looks forward to these discussions.	The Applicant is committed to continuous engagement with TRC during all phases of the Project. Section 5 of the Amendment Report provides further detail on future engagement to be undertaken by the Applicant. Future engagement will include (but not limited to) a committee to establish the CBF, enter into a VPA, and ongoing meeting meetings with relevant regulators in accordance with planning and design, especially required intersection upgrade, and construction programming.	In this table Section 5 of Amendment Report
TRC - 20	Contributions and Agreements	Council supports the Applicant providing a Community Benefit Fund to fund local initiatives. The EIS advises that the fund will be administered by a dedicated committee, being the Bendemeer Community Benefit Fund Committee. TRC would be willing to provide a representative to the group. Council notes there would be a high administrative burden in comparison to the estimated economic benefit, approximately \$50,000 per year, and prefers that the Applicant fund a third party to administer the fund.	The Applicant is committed to working with TRC to develop a Governance and administration structure that would not burden Council.	In this table
TRC - 21	Social	In respect of stakeholder engagement and social impact on the local Bendemeer community, Council is aware that there is significant community angst among many residents. Council notes that a total of 77 submissions have been lodged with your department, of which 60 submissions objected to the proposal. The potential for this project to result in the breakdown of this community, as has occurred with other renewable energy projects, needs to be given much greater and more serious consideration by both the Applicant and your department.	The Applicant is committed to effective and genuine engagement with stakeholders and the local community to seek feedback, help inform the Project, ensure community concerns and comments are considered, and potential impacts are avoided, minimised or mitigated. Engagement will continue with Project stakeholders through subsequent phases of the Project. Notwithstanding the above, a Construction Environmental Management Plan (CEMP) will be prepared prior to the commencement of construction for the Project, which will include a process for receiving and responding to community complaints. Since conception of the Project, a total of 457 stakeholders have been engaged, including 339 individuals and 118 organisations. A total of 1,968 interactions have taken place across various communication channels. These have all been recorded via a dedicated Project stakeholder register system. Since lodgement of the EIS in July 2023, the Applicant has undertaken further engagement with stakeholders to discuss the amendments to the Project and concerns raised in submissions. Through an extensive engagement program and sharing of communication materials with updated technical assessments for the Amended Project, the Applicant has been building an understanding and have been addressing stakeholders' potential concerns. During engagement the Applicant has also been gathering information that could inform the broader communication required to support future stages of the Project including during the delivery stage. Stakeholder concerns have been considered and addressed in the Project design (where possible) and with the support of technical studies. Section 5.1 of the Amendment Report details the engagement activities to continually update, inform and address community concerns. These activities include Project website (https://bendemeerenergyhub.com.au/solar-project/), advertising, summary booklets, newsletters, community hotline, community pop-up sessions, community hub, and event & community sponsorship. Specific engagement related to the submissions is documented within this report (refer Section 3.1).	Section 3.1 Section 5 of the Amendment Report Section 5 and Appendix E of the EIS
TRC - 22	Social	The EIS commits to developing a Stakeholder Engagement Plan, Local Employment Plan and a Workforce Accommodation Strategy. Council's expectation is that it will be consulted on these plans to ensure that local benefits are maximised.	As part of the preparation of the Scoping Report for the Project, a Stakeholder Engagement Plan (SEP) was prepared to guide ongoing consultation and engagement throughout the development of the EIS, and through subsequent phases of development of the Project. The Applicant is committed to a continuous engagement with TRC, which includes during the preparation of the Local Employment Plan and WAS.	Appendix B of the Amendment Report

Ref No.	Theme	Submission	Response	Where Addressed
TRC - 23	Social and Economic	Council is open to connecting the Applicant with local training providers, in order to provide upskilling and training opportunities should this be available during the construction and operation phases of the Project. Should the Project be approved, TRC requires some certainty that local businesses will be engaged to help support the local economy.	Should the Project be approved a Local Employment Plan will be developed and implemented for the Project which includes measures for the EPC Contractor to encourage and set targets for local employment. The plan will further support the local economy, though measures that provide opportunities for local businesses to submit proposals and tenders and prioritise the use of goods and services that can be sourced locally and are competitive for price and quality. These are further detailed in the Updated SIA and summarised in the Updated Mitigation and Management Summary (Appendix B of the Amendment Report).	Appendix B and Appendix P of the Amendment Report
TRC - 24	Cumulative Impact	As noted in the Social Impact Assessment Report accompanying the EIS, the Project may potentially result in significant cumulative impacts where the construction timeframe coincides with other renewable projects in the Region. Such impacts may include but are not limited to increased traffic congestion, a change in rural character and accommodation shortages. To mitigate these impacts, Council supports the Applicant's commitment to develop a Local Employment Plan, Workforce Accommodation Strategy and Traffic Management Plan. Council's expectation is that it will be consulted on these plans as well as the anticipated construction timeframe, should the Project be approved.	A Local Employment Plan, Workforce Accommodation Strategy and Traffic Management Plan will be prepared for the Project in consultation with TRC (refer Appendix B of the Amendment Report). The Applicant is also committed to engaging with TRC regarding Project's timeline.	Appendix B of the Amendment Report
TRC - 25	Project benefits	TRC would like to understand whether the cost of power to the local community will be reduced as a result of this Project. Apart from the VPA and CBF, what other benefits will there be to the local community from the perspective of reduced electricity bills.	The Project will provide approximately 200 MW AC (255 MW DC) to meeting existing and future energy demand in NSW and throughout the NEM, and dispatchable energy through the proposed grid-scale BESS with a capacity of up to 150 MW / 300 MWh. The Project together with other renewable energy projects will help to drive down the cost of wholesale electricity by increasing the availability of large-scale generation certificates, which reduces certificate spot prices. The lower spot price cut the cost of the Renewable Energy Target for consumers and may result in lower electricity pass through costs for households and businesses in future years (Clean Energy Regulator, 2023).	Section 5.1

TABLE 4-11 DEPARTMENT OF PLANNING, HOUSING AND INFRASTRUCTURE (DPHI) - BIODIVERSITY

Ref No.	Theme	Submission	Response	Where Addressed
DPHI 05	Biodiversity	In relation to Box Gum Woodland CEEC: - Derived native grassland (DNG) - confirm if any of the impacted Box Gum is DNG. If there is DNG, please identify the area impacted (ha), and provide a map showing the location of DNG and woodland in an updated Amendment Report and BDAR. - SAII - Assess impact in accordance with: - the four principles set out in clause 6.7 of the BC Regulation - criteria set out in Subsection 9.1.1 of BAM2020	- There is no derived native grassland mapped within the Subject Land. A Land Category Assessment was prepared for the Project and the allocation of Category 1 and Category 2 land has been endorsed by BCS (now CPHR). All areas of woodland vegetation were assigned as Category 2 (regulated) land and the remaining grassland areas were assigned as Category 1 (exempt) land. - Potential impacts on entities at risk of SAI have been assessed in accordance with: - The principles applicable to determination of "serious and irreversible impacts on biodiversity values" specified in s6.7 of the <i>Biodiversity Conservation Regulation 2017</i>; and - s9.1 of the Biodiversity Assessment Method 2020, "Assessment for serious and irreversible impacts on biodiversity values".	Appendix E of the Amendment Report

Ref No.	Theme	Submission	Response	Where Addressed
DPHI 06	Biodiversity	In relation to MNES assessment: - For Box Gum Woodland: - update Appendix D MNES of the amended BDAR which currently assesses impact area for the EIS layout (ensure impact area for each PCT and corresponding offset liability is identified) has this been updated - provide consideration of relevant Conservation Advice, National Recovery Plan and Threat Abatement Plans has this been addressed? - For EPBC Act species listed in Tables 4-2, 4-3, 4-4 and 4-5: - update these tables to provide a table summarising impact area (ha), associated PCT and offset requirement (or state that species were not included for further assessment with justification).	- Credit reports have been regenerated. Appendix D and relevant tables within the BDAR have been updated to reflect the current area of impact and corresponding offset liability for threatened ecosystems and species - The relevant Conservation Advice, National Recovery plan and Threat Abatement Plans for Box Gum Woodland have been considered in the assessment.	Appendix E of the Amendment Report
DPHI 07	Biodiversity	In relation to a Biodiversity Stewardship Site: - Provide a figure showing the location of the BSS. - Identify the amount and condition of Box Gum Woodland (is there any Box Gum DNG?). Include confirmation that there would be a minimum of a 1:1 or 1:1.5 ratio to enhance poor-quality Box Gum Woodland or DNG. - Provide details on how this land will be secured prior to any impacts occurring on site.	The Applicant has committed to implementation of voluntary conservation measures to mitigate impacts to Box Gum Woodland TEC, through the dedication of areas of retained vegetation as a Voluntary Biodiversity Stewardship Site. A Management Plan will be prepared for these areas that provides for the assisted regeneration of 74.0 ha of Box Gum Woodland, and 27.7 ha of active restoration of non-woodland areas. Through these measures there will be a net benefit to Box Gum Woodland, providing for management under a voluntary Biodiversity Stewardship Site with a 1:1.8 ratio of impacted to improved/enhanced areas. These voluntary conservation measures are in addition to the offset obligations to be addressed through the BOS, and other mitigation measures proposed to minimise impacts to biodiversity values.	Appendix E of the Amendment Report

TABLE 4-12 DEPARTMENT OF PLANNING, HOUSING AND INFRASTRUCTURE (DPHI) - SOCIAL

Ref No.	Theme	Sub-Theme	Detail	Response	Where Addressed
DPHI – 01	Social	Community and secondary impacts and mitigations	Management plans (LEP, WAS, local procurement initiatives) contain little detail and no desired outcomes and targets (see Table 9 of the Technical Supplement and Table 1 of the Social Impact Management Toolbox). Several specific mitigations are noted in the SIA, including those raised by the community however they are not included in the mitigations, e.g. relocating workers from some short-term accommodation when there are key tourism events. Some mitigation approaches (e.g. skills shortages and demand for services) are only to engage, monitor and establish grievance systems Implication It is not possible to assess the validity of the plans in managing the impacts as they do not define what they seek to achieve. Suggestion Update of table 7.1 to; - Reflect all the impacts in the SIA - Include desired outcomes and targets - Update indicators to reflect the impact does not measure only the implementation of the mitigation	The following has been considered within the updated Social Impact Assessment (Appendix P of the Amendment Report): - Table 7-1 - Added 'Desired Social Outcome' and 'Target' columns. - Where monitoring activities, performance indicators and targets overlap across social impacts they have been merged in Table 7-1 to reduce repetition and avoid unnecessary complexity in the monitoring framework. - Added decommissioning and cumulative sections to reflect all the impacts in the SIA.	Appendix P of the Amendment Report

Ref No.	Theme	Sub-Theme	Detail	Response	Where Addressed
DPHI – 02	Social	Vulnerable groups and distributive equity	The social baseline identifies the elderly, young and Aboriginal people as the most vulnerable in Bendemeer, and Bendemeer as generally considerably more disadvantaged than its regional context. However almost no analysis is made of how they will experience impacts differently and how that would be managed Implication Without targeted interventions the most vulnerable are less likely to benefit from the project yet experience the negative impacts. This would result in increasing inequality in the community. Suggestion Ensure all mitigation and management plans identify desired outcomes for those most vulnerable in the Bendemeer community and commit to measures that may be necessary to support their inclusion.	The following has been considered within the updated Social Impact Assessment (Appendix P of the Amendment Report): - Section 3.2.1.1 - Added mitigation measures to ensure accessibility to grievance mechanism. - Section 6.2.2.1 - Added mitigation measures considering measures that should be implemented to address the specific challenges faced by vulnerable people including the Bendemeer CBF outreach programs, training, scholarships, apprenticeships, and collaborations with local organisations. - Section 6.2.2.2 - Added mitigation measures to ensure vulnerable groups have opportunities to benefit from the project through equitable employment opportunities, support throughout application process, training and mentorship	Appendix P of the Amendment Report
DPHI – 03	Social	Decision making systems	The CBF does not define ‘local’ with regard to who the beneficiaries and committee members will be. There is no mention of the need to potentially support some groups/people to engage with the CBF, especially noting the high disadvantage in Bendemeer. There is no mention of benefitting the most disadvantaged or of addressing the long-term benefits and sustainable initiatives that will endure beyond the 30 years, as noted in the decommissioning assessment. Suggestion Provide further clarification as to the; - geographical scope of the CBF - approach to benefiting the most disadvantaged - delivery of long-term and sustainable initiatives	The following has been considered within the updated Social Impact Assessment (Appendix P of the Amendment Report): - Section 6.2.2.1 - Outlines the geographic scope of the CBF including descriptions for local initiatives and initiatives outside of the local area - Includes mitigation measure to prioritise local initiatives that will benefit or mitigate impacts to vulnerable groups and foster long-term social, economic and environmental benefits	Appendix P of the Amendment Report
DPHI - 04	Social	Workforce assumptions and assessment	The workforce assumptions table defines local as beyond Bendemeer, including entire LGAs. However, the assessment conflates local aspirations and opportunities with regional opportunities, overstating the benefit. Implication Unclear and unlikely that employment options will deliver benefit in Bendemeer. Suggestion Commit to define and distinguish between opportunities and approaches for local community and regional economic benefits in the LEP.	The following has been considered within the updated Social Impact Assessment (Appendix P of the Amendment Report): - Section 6.2.1.2 - Sentence added for LEP to define and distinguish between approaches for local community and regional employment.	Appendix P of the Amendment Report

4.2 RESPONSES TO PUBLIC SUBMISSIONS

This Section responds to the submissions received from the public and have been grouped by themes described and analysed in **Section 2**. A submission reference number is listed for the issue to identify which stakeholders have raised each issue. Refer to **Appendix A** to identify each specific stakeholder reference number.

As outlined in **Section 2.1**, a total of 231 submissions from the community and interest groups were received relating to the Project. Due to the overlap in the submissions from individuals and interest groups, responses to these submissions are included in the following sections grouped by theme.

Community submissions received, both in support and objection, had similar themes, and therefore most of the responses detailed below relate to multiple submissions. Dedicated section headings are provided for overall theme topics. Examples of specific quotes from the submissions are provided for each theme to provide further context regarding the issue raised.

The quantity of submissions stated for each theme relates to the number of total submissions, and generalised where appropriate. Not all submissions were explicitly presented in each table per theme to avoid length and repetition and are truncated where possible to highlight each theme. It is noted that a single submission may cover numerous issues and while this does not alter the total number described in **Section 2.1**, such submissions were split between themes where appropriate.

Example quotes that were provided by an interest group are highlighted as such. Submissions of support for relevant themes are highlighted in light green.

4.2.1 THE PROJECT

4.2.1.1 LAYOUT AND DESIGN

Consideration of Environment and Social Aspects

There were seven (7) public submissions of support that commended how the Applicant has amended the layout and design of the Project to reduce the impacts where possible.

TABLE 4-13 IMPACT MINIMISATION THROUGH DESIGN PUBLIC SUBMISSIONS

Submitter ID	Example Text from Submission
SE-61508460	"The project itself appears to be carefully designed to manage impacts at an appropriate site and include suitable measures for continuing to mitigate impacts through the project life."
SE-61489067	"The Solar farm is only on one property and the design of the project has little visual impact on the village and as well the design layout allows for the grazing of sheep which does not according to CSIRO and other research in Australia reduce the carrying capacity of the land and can be returned to its original state at end of life unlike coal and gas projects."
SE-61588239	"I'm glad to see that the proposed project site has had alterations to minimise potential biodiversity impacts"

The Project has been designed to align with the site selection processes that are set out in the Large-Scale Solar Energy Guidelines (DPE, 2022a). The process of site selection is referred to in Section 2.5 of the EIS.

Table 3-3 demonstrates how the Project has been further refined since EIS exhibition to provide greater avoidance and mitigation of impacts. **Section 4.2.5.1** discusses impact avoidance specifically relating to biodiversity.

Heat Island Effect

There were two (2) submissions which raised concerns that the Project will result in a heat island affect.

TABLE 4-14 SUBMISSIONS REGARDING HEAT ISLAND EFFECT CONCERNS

Submitter ID	Example Text from Submission
SE-61438482	"the "heat island" effect on the atmosphere within the project area has neither been adequately assessed nor accounted for. The impact of Heat Island effect will alter the 'small water cycle' and damage the local landscape due to changes to the weather systems locally"
SE-61420238	"the solar panels ... will contribute to an increase in temperature."

The Large-Scale Solar Energy Guidelines require any solar energy project that is located adjacent to a horticultural or cropping activity to ensure that the solar array is setback from the property boundary by at least 30 m to mitigate any heat island effect. The properties surrounding the Project are not undertaking horticultural or cropping activities, therefore this rule does not technically apply to the Project. However, in general, the solar arrays are located more than 30 m from the property boundary. The property to the west of the Project is currently used for grazing (refer Section 2.4.2 of Appendix J in the Amendment Report), as such there are not expected to be any impacts on that property relating to a heat island effect from the Project.

This setback has also been applied in guidelines for solar developments in other jurisdictions and is therefore representative of an accepted setback distance. For example, the Victorian Solar Energy Facilities Design and Development Guideline states ...

"Where a solar energy facility is proposed adjacent to existing horticultural or cropping activities, a minimum 30 m separation distance is appropriate, measured from the property boundary to any part of the physical structure of the facility.

The PV heat island effect on sensitive vegetation (such as cold-climate horticultural cropping) describes the transfer of heat from built form to its surrounds, where the ambient temperature around the built form is higher than that of surrounding vegetated areas, particularly at night. While there are few studies of spatial heat dissipation from solar infrastructure, those that exist acknowledge the potential for ambient air temperatures within the perimeter of a solar energy facility to potentially increase by 3 to 4 degrees Celsius.

However, those studies also found that the heat that was generated dissipated rapidly over a short distance. Some found that at 30m from the solar PV array, the air temperature variation was indistinguishable from ambient air temperature".

Data on the how solar farms in Australia affect climate is limited, and what is available does not provide conclusive evidence. Some studies suggest that solar farms have a cooling effect on the area immediately adjacent the Project (Armstrong, Ostle Nicholas, & Whitaker, 2016). Others suggest that there are minor temperature increases above and adjacent the solar panels (Yang, et al., 2017; Barron-Gafford, et al., 2016). These studies found the vegetation was effective to reduce the gain of heat and subsequent storage within soil (Barron-Gafford, et al., 2016), suggesting that vegetation screening, in addition to the 30 m buffer described above, are applicable measures for reducing the potential for heat island impacts.

The amended layout presented in this report and in the Amendment Report may require refinement based on detailed geotechnical investigations. As such, the Applicant requires the ability to micro-site Project elements. This will allow the design to be adjusted to, for example, achieve minimum offset requirements from neighbouring properties, avoid unnecessary excavation, vegetation clearing, and/ or benefit constructability, plant and equipment access.

To allow the Applicant to make general design refinements without the need to modify the application, the technical assessments have assessed impacts for an area that includes the area of land that will be temporarily disturbed during construction of the Project with areas to be rehabilitated following construction. This means that micro-siting does not jeopardise the assessment of impacts as the areas within which micro-siting will occur were assessed in this report and the Amendment Report for the proposed amended layout.

4.2.1.2 LOCATION

Site Selection

Ten (10) submissions praised the site suitability while thirty-two (32) submissions raised concerns regarding site selection.

TABLE 4-15 PUBLIC SUBMISSIONS REGARDING SITE SELECTION

Submitter ID	Example Text from Submission
SE-61484754	"The location and land use type that the solar farm is planned to be construction on is very balanced for this development."
SE-61484729	"The site selection has been comprehensive to mitigate the potential adverse environmental factors connected to a large project like this and this is further validated with the comprehensive Environmental Impact Assessment that has provided a balanced objective overview of the project."
SE-61551974	"The Bendemeer Solar Farm is located adjacent to ideal existing transmission lines (for connection)"
SE-60625993	"There are too many farms that boarder or are in close proximity to the proposed site."
SE-61419483, SE-61529238	"These projects are too close to residents"

Submitter ID	Example Text from Submission
SE-61065957	"I own a residential property directly adjacent to the proposed Solar farm on the western boundary of the project. My dwelling is less than 500m from the pv array. Below is a statement from the nsw government guidelines. "The New South Wales government has updated guidelines to state planning rules to protect some of the state's major regional centres from "encroaching solar and wind development," after receiving almost unanimous support for the changes. The planning amendment, first flagged by the government in October, seeks to restrict renewable energy projects from building within 10km of a commercial centre, or within 5km of residential land, in Albury, Armidale, Bathurst, Dubbo, Griffith, Orange, Tamworth and Wagga Wagga." This proposed Solar farm is less than 500m from my home and 50m from my nearest boundary. This is not even close to the 5km stated in the guidelines. Bendemeer is within the Tamworth LGA."
SE-61535092, SE-61508221	"The solar farm is also too close to the town"
SE-61454959	"it being so close to the edge of our village"
SE-61482457	"It is not fair that this project comes along when there is land as far as they eyes can see in every direction yet it is all because of ONE POWERLINE."
SE-61429209	"explain how it is acceptable that the Bendemeer Solar project can possibly be acceptable given its location to the village? Bendemeer in comparison is just over ONE KILOMETRE from the project."
SE-61428462	"This cannot be allowed to go ahead it is environmental vandalism. If you must build this project surely it must at least adhere to the NSW Govts own guidelines for a start. There is NOT ONE solar project of this scale sited as close to a village as this one nor it there a solar project located in the mountains"

Section 2.2.2 of the Large-Scale Solar Energy Guideline outlines where large-scale solar energy development is permitted in accordance with the EP&A Act and relevant environmental planning instruments (EPIs), including local environmental plans (LEPs) and SEPPs.

Key provisions include:

- The zoning and land use provisions of the relevant LEP; and
- Part 2.3, Division 4 of the T&I SEPP (electricity generating works).

In accordance with the Tamworth Regional LEP, large-scale solar energy development is permissible with consent on any land zoned for rural (RU1, RU2, RU3, RU4), industrial (IN1, IN2, IN3, IN4), or special purpose (SP1, SP2) uses in the LEP.

As outlined in Section 2.4 of the EIS, the Project Area is zoned RU1 (Primary Production), with adjacent land zoned RU1 and RU4 (Primary Production Small Lots). The development is therefore permissible with consent under the Tamworth Regional LEP (refer to Section 2.3 of the EIS).

Section 2.42 of the Transport and Infrastructure State and Environmental Planning Policy (T&I SEPP) outlines specific development consent conditions for electricity generating works that are SSD that are proposed within regional cities (**Figure 4-1**). The regional cities covered by these conditions include Tamworth, Orange, Albury, Armidale, Bathurst, Dubbo, Griffith, Wagga Wagga, Goulburn and Mudgee.

While Bendemeer is located within the Tamworth LGA, it is not located within the 'subject land' that is identified under Section 2.42(2) of the T&I SEPP (refer **Figure 4-1**). Therefore, Bendemeer Village is exempt from these conditions. There is no specific distance stated within the Large-Scale Solar Energy Guidelines (DPE, 2022a) regarding proximity of an SSD development to regional cities or dwellings.

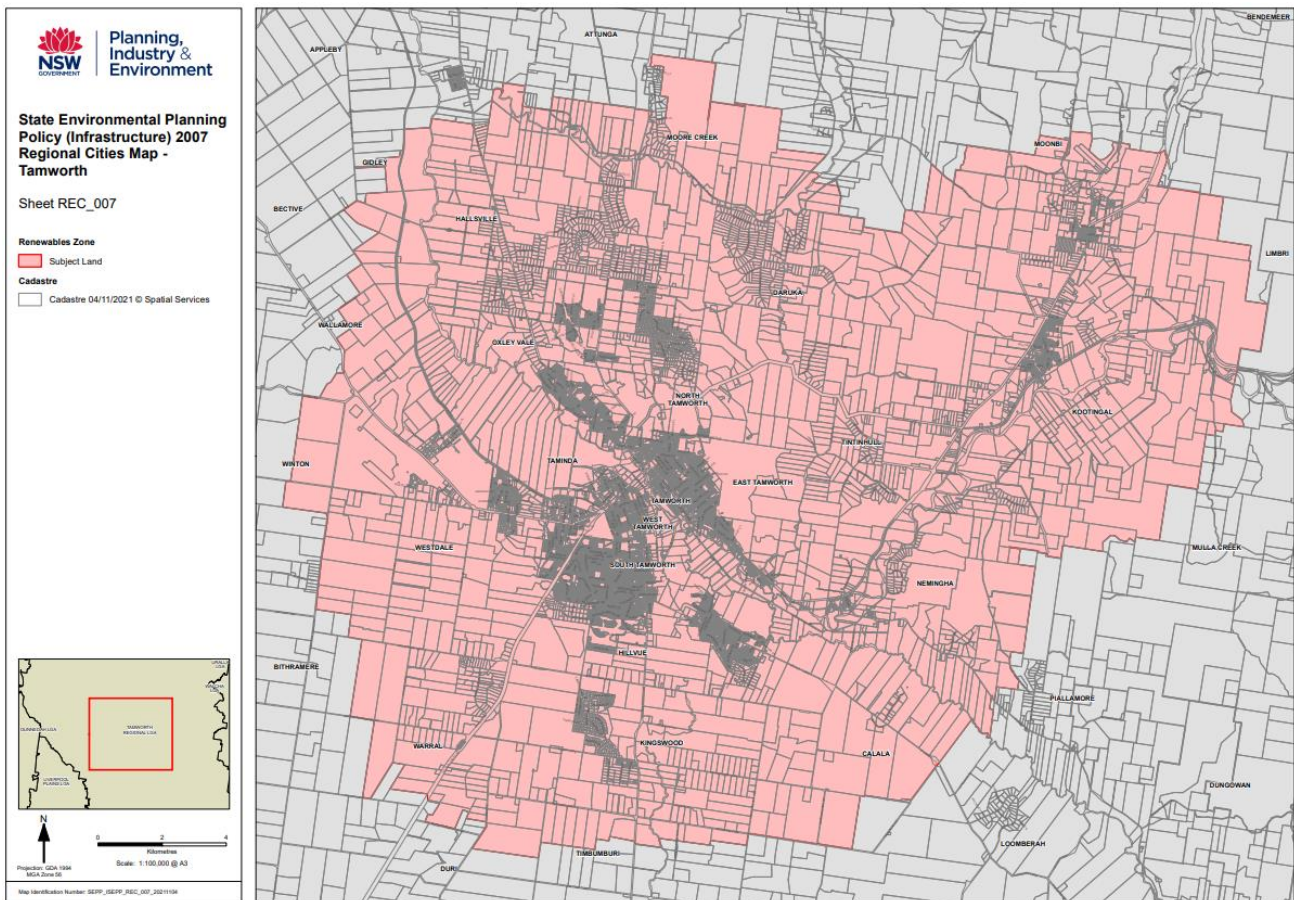


FIGURE 4-1 T&I SEPP REGIONAL CITIES MAP (TAMWORTH)

The Project is also located within an area that is outlined by the NSW DPHI Draft Energy Policy Framework as desirable for solar energy (NSW DPE, 2023) (reproduced in **Figure 4-2**). The mapping produced by DPHI considered proximity to existing or planned transmission infrastructure, potential for social or environmental impacts, and solar irradiance among other factors.

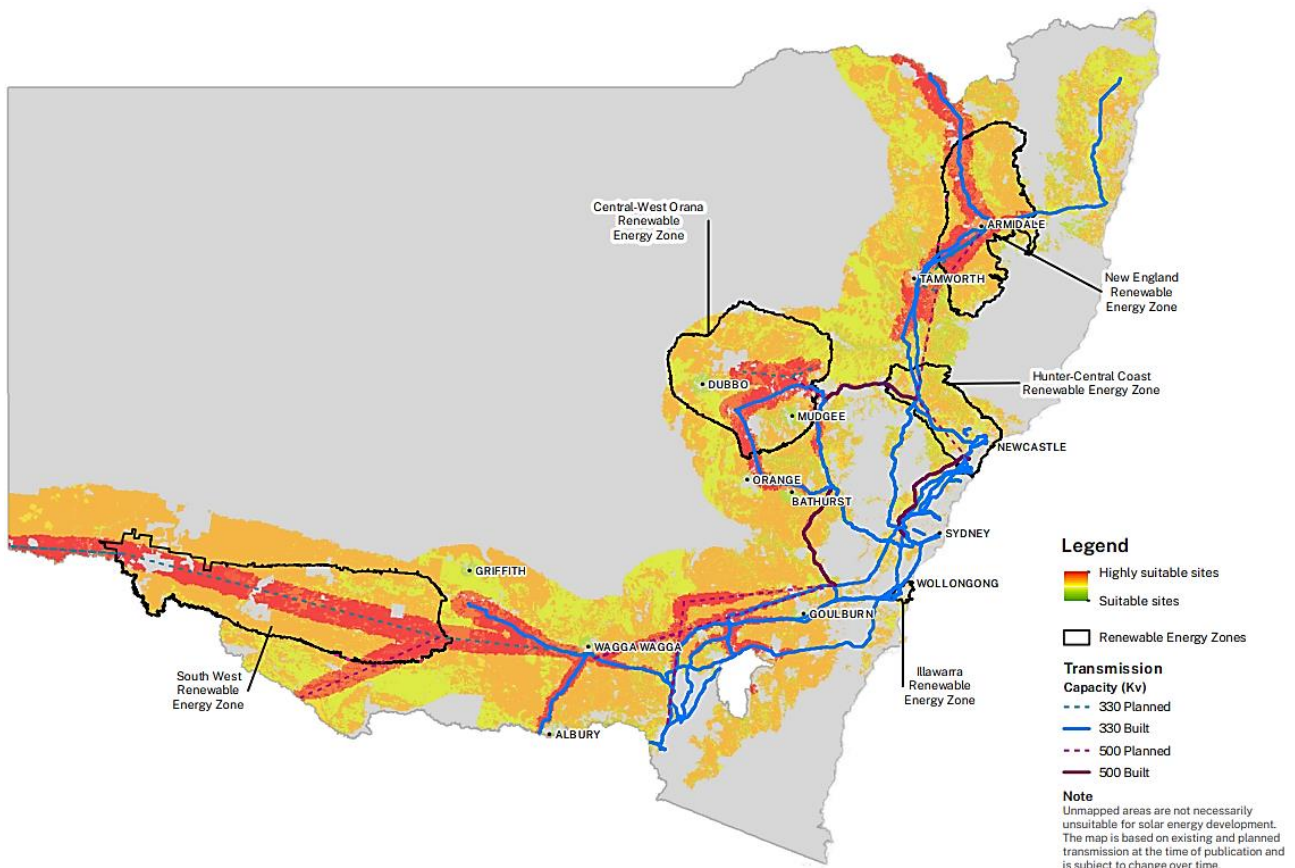


FIGURE 4-2 DRAFT ENERGY POLICY FRAMEWORK DESIRABLE SOLAR SITES (NSW DPE, 2023)

The outcomes of technical assessment undertaken for the EIS were used to inform the site selection and Project layout. Those relevant to the proximity of the Project to dwellings include noise and visual impact. The EIS concluded that:

- Operational noise levels complied with criteria at all non-associated dwellings, including the Bendemeer Village (Section 6.5.4 and Appendix J of the EIS);
- Construction noise compliance can be achieved with the implementation of noise mitigation measures (Section 6.5.7 and Appendix J of the EIS); and
- The visual impact at all non-associated dwellings was determined to be low (Section 6.6.4 and Appendix K of the EIS).

The Project layout has been further refined since exhibition of the EIS in response to submissions and to further reduce environmental and social impacts. The revised noise and visual impact assessments, based on the amended Project layout, concluded that:

- Construction and operational traffic noise impacts due to the additional traffic associated with the Project have been assessed and no traffic noise impacts are expected (refer Appendix H of the Amendment Report);
- The Project will meet construction and operational noise threshold compliance at all non-associated receivers with the implementation of mitigation measures;

- Revised dwelling and public viewpoint visual impact assessments were conducted for the amended Project layout, with the detailed assessment for five dwellings (R510, R539, R568, R27 and R113) returning a reduced number of occupied cells in the wireframe diagrams; and
- The overall visual impact ratings for all non-associated dwellings remained the same for the EIS layout and the amended Project layout except for one dwelling R113, which reduced from low to very low impact.

The site selection also provides significant social and economic benefits including an increase in local employment and economic activity associated with the Project.

Insufficient Solar Exposure

Three (3) submissions specifically raised concerns that Bendemeer does not have sufficient solar resources to make the Project efficient and viable.

TABLE 4-16 PUBLIC SUBMISSIONS REGARDING SOLAR EXPOSURE LEVELS

Submitter ID	Example Text from Submission
SE-61564215	"The Bendemeer Solar Farm has an insurmountable lack of (weather) fuel, which renders it to be impossible to ever be considered as a practical and economic supplier of electricity to the Grid."
SE-61535741	"Solar radiation level is average at most"
SE-61429209	"Bendemeer is located in a below average solar energy area"

The annual average daily solar exposure in Australia is presented in **Figure 4-3**. The Bendemeer region has an average daily solar exposure level of 15-18 MJ/m². Site specific average daily solar exposure based on typical meteorological year global horizontal irradiation data procured from Solargis is 1,853.9 kWh/m² or 18.3 MJ/m².

Key factors in determining the suitability for a solar farm location include elevation, topography and weather patterns. The high altitude and the cooler climate of the New England region are both benefits for more efficient solar production, as the cooler temperatures will increase the conversion efficiency of PV modules. Solar modules are also more efficient at high altitudes, as the solar irradiation is typically higher (Wheeling, 2019). Other solar farm developments in the New England region and hence similar irradiation levels include Metz Solar Farm, New England Solar Farm, Oxley Solar Farm and Tilbuster Solar Farm.

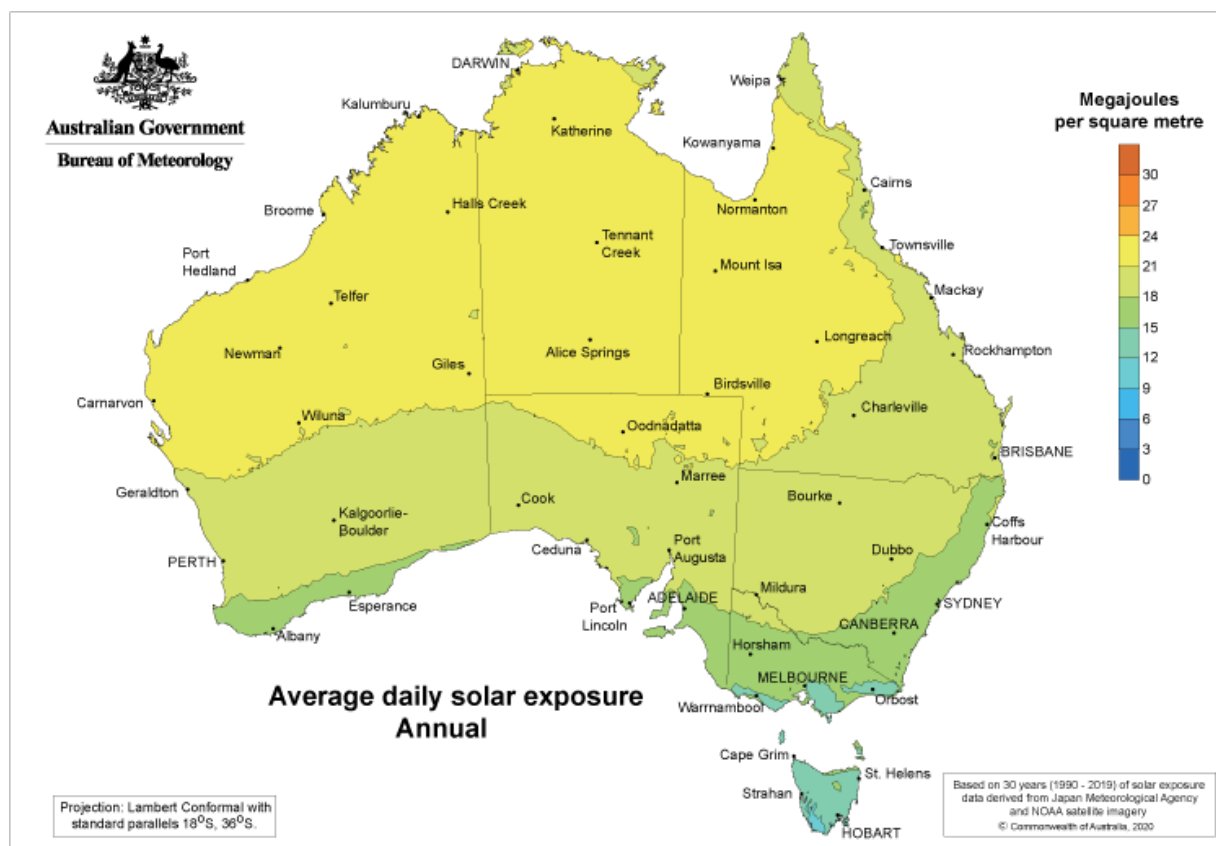


FIGURE 4-3 AVERAGE DAILY SOLAR EXPOSURE MAP (BOM, 2020)

4.2.1.3 USE AND ACTIVITIES

Ten (10) submissions were in support of the Project's proposed site use while ten (10) raised concerns regarding the loss of agricultural productivity as a result of the Project; however, there were also sixteen (16) submissions in support of the Applicant committing to implementing agrisolar activities during operation of the Project.

TABLE 4-17 PUBLIC SUBMISSIONS REGARDING LAND USE CONFLICTS

Submitter ID	Example Text from Submission
SE-61548736	"The fact that the Applicant is allowing for the ongoing use of the Project area for agricultural productivity is a positive outcome to ensure the agricultural integrity of the region is maintained and reduce the removal of land from the agricultural industry."
SE-61148220	"That we can combine farming with power generation seems like a great solution where more people, e.g., farmers can benefit and power generation can be more localised than these days."
SE-61584479	"It was also pleasing to see that the Project provides for the continuation of use for agricultural productivity, ensuring the ongoing agricultural prosperity of the region."
SE-61563719	"Additionally, by maintaining the use of the land for agricultural purposes, this is an excellent method of maximizing land productivity and will ensure that agricultural activity in the region is not significantly hindered."
SE-61241211	"With a limited impact on high value agricultural practices on the development site, the reintroduction of livestock after construction as per the EIS, agriculture and renewable energy in conjunction can together pave the way forward towards a brighter, more viable and environmentally sustainable future for everyone."

Submitter ID	Example Text from Submission
SE-61491710	"The Solar project will allow grazing of sheep to continue under the panel once constructed with no reduction in productivity if not proven to be an increase and the solar panels can be removed at the end of time allowing the land to be returned to the original state in a short time not like a mine or gas project."
SE-61428462	"the land will not be farmed as could be without the solar panels up to 4.2m high shading the land where temperatures fall to negative 13 degrees with negative 11 only a few weeks ago, ground cover does not grow on south side of house during winter."
SE-61486221	"It has now been proven in practice that large scale commercial solar plants are not suitable for grazing sheep. Small solar installations built to power farms which can also supply power to the grid are usually able to accommodate sheep and lambs because they are built higher off the ground. This will not apply to the proposed solar areas."

Numerous submissions were received in support of the proposed mixed land use with agrisolar practices. The benefit of the continued use of the Project Area for grazing activities will reduce the loss of agricultural productivity from the renewable energy generation.

A SAIA and Updated SAIA (refer Appendix L of the EIS and Appendix J of the Amendment Report) was conducted to assess the agricultural productivity of the Project Area and the surrounding properties. As summarised in the EIS (refer Section 6.7.6), the impact of the Project on agricultural productivity of the land was estimated to be \$53,214 per year based on the following assumptions:

- A change in land use within the Project Area of 14.8 ha resulting in a reduction of \$5,916 per year of operation, as outlined in Table 14 of Appendix L of the EIS);
- An estimated overall stocking reduction of 20% for the remaining Project Area subject to agriculture, resulting in reduction of \$47,298 per year of operation; and
- Sheep grazing enterprise only.

The Updated SAIA reassessed the impact on agricultural productivity in alignment with the proposed changes, and found that during the operational phase, the impact of the Project on productivity of agricultural land is estimated to be \$54,438 per year based on the following assumptions:

- Change in land use within the Project Area of 18.5 ha resulting in a reduction of \$7,395 per year as outlined in Table 14 of Appendix J of the Amendment Report;
- An estimated overall stocking reduction of 20% for the remaining Project Area subject to agriculture, resulting in reduction of \$47,043 per year; and
- Sheep grazing enterprise only.

The assessment concluded that there would be no measurable change to the current agricultural land use and productivity of the properties surrounding Project, and that the impact to the Project Area would have a negligible impact on the local, regional and state agricultural services.

The Applicant is proposing that the sheep grazing can continue within the areas containing the solar arrays (agrisolar). Sheep grazing will be considered during the detailed design and construction phase of the solar arrays, with the management of the sheep grazing developed in consultation with the landowner.

Agrisolar practices have been implemented progressively in Australia since 2015. The practice has proven to be an effective partnership for both solar farm operators and graziers (CEC,

2023). Solar panels assist with moisture retention of the soils/vegetation below, creating ideal conditions for native and pasture grasses to grow. Wind speeds below solar panels are reduced, which in turn reduces wind chill, which has been demonstrated to decrease mortality of lambs by up to 8% (CEC, 2023). Preliminary results from the Parkes Solar Farm also suggest that the quality of wool produced by sheep in agrisolar is greater, even in drought conditions (ABC, 2020). Initial results showed the two-year-old wethers had fleece rates of between 7 and 8 kilograms and bodyweight and fleece condition had been excellent, given the first six months of the trial was conducted in drought (ABC, 2020).

4.2.1.4 FOREIGN OWNERSHIP

Five (5) community submissions expressed concern regarding the foreign ownership of the Applicant.

TABLE 4-18 PUBLIC SUBMISSIONS REGARDING FOREIGN OWNERSHIP CONCERNS

Submitter ID	Example Text from Submission
SE-61575707	"The Applicant Metis Energy Limited ("Metis") is a Singapore conglomerate. It has no interest in our area and its sole motivation is PROFIT. It is not reasonable to expect such a transnational conglomerate to have any meaningful interest in preserving the local environment or any genuine interest in fostering or enhancing our local community."
SE-61522710	"Foreign companies are the investors so the money isn't even staying in Australia"

Athena Energy Holding Pty Ltd is an Australian company, owned wholly by Metis Energy Limited. Metis has a long-term vision to support the Australian renewable energy transition, and develop, finance, construct, own and operate their projects as a fully integrated renewable energy company with a long-term approach. has committed to integrating internationally recognised environmental, social and governance (ESG) standards into their business practices.

Metis Energy has more than 2 GW of renewable projects in the Asia-Pacific (APAC) region, fully developed or being developed through their in-house expertise. This experience and capability will enable the Applicant to successfully deliver the Project. Metis Energy has successfully managed the delivery of multiple large-scale renewable developments, including 700 MW of solar, within the APAC region, focusing on rolling out their portfolio in Australia, Indonesia, Bangladesh, and the Philippines. Metis has strong financial capabilities and a sustainable growth strategy that will aid in the Project delivery.

An Economic Impact Assessment (refer Section 6.14.3 of the EIS) found that the Project will have many positive annual impacts on the regional economy. A revised Economic Impact Assessment (refer Appendix O of the Amendment Report) included in the Amendment Report found positive annual impacts on the regional economy include:

- \$161M direct and indirect economic output during the construction phase and \$32M during the operation phase;
- \$61M direct and indirect value-added during construction and \$21M during operation;
- \$32M direct and indirect household income during construction and \$3M during operation; and

- 451 direct and indirect jobs created in the study area during construction and 35 jobs during operation.

There are further benefits to the NSW economy listed in Section 6.14.3 of the EIS, and the Economic Impact Assessment (refer Appendix R of the EIS and Appendix O of the Amendment Report).

The Applicant has also proposed the introduction of a community benefit fund (CBF) of \$50,000 per annum for the life of the Project (based on a 200 MW AC development). The CBF will be managed under a Voluntary Planning Agreement (VPA) with TRC, where the balance will consider specific terms such as additional CIV-based contributions to be negotiated. The CBF will provide value to Bendemeer and the regional community by providing support to local and community development or neighbourhood level initiatives that have strong community support. The CBF is also anticipated to provide benefits to regional infrastructure and services.

4.2.2 DECOMMISSIONING AND REHABILITATION

4.2.2.1 REHABILITATION

Four (4) submissions raised concerns about the decommissioning of the Project and rehabilitation of the Project Area.

TABLE 4-19 PUBLIC SUBMISSIONS REGARDING DECOMMISSIONING AND REHABILITATION CONCERNS

Submitter ID	Example Text from Submission
SE-61575707	"There must be strict requirements for rehabilitation backed by bank bonds to ensure compliance otherwise the foreign Applicants will be able to simply walk away from any rehabilitation leaving the area as a deteriorating and rotting mess of derelict panels and towers and batteries and eroding roads with no maintenance."
SE-61438482	"Claims to return the land to its original state is not substantiated by significant testing of land. The land must be thoroughly tested for the proportional composition of all minerals and elements prior to the construction."
SE-61429209	"Soil Stripping for Rehabilitation This would indicate that the solar project requires the removal of the top soil from the project site in order to build the project – is this correct? To what depth does the soil get removed? How is the soil removed? The top soil would be stored for future rehabilitation – this again shows the project is not environmentally friendly and destroys the land upon which it will be installed."

Submitter ID	Example Text from Submission
SE-61575707	"These issues are major concerns. The usable life of the solar panels and turbines is approximately 20 to 25 years and the proponents will have tailored their financing to a 25 year program. There must be strict requirements for rehabilitation backed by bank bonds to ensure compliance otherwise the foreign proponents will be able to simply walk away from any rehabilitation leaving the area as a deteriorating and rotting mess of derelict panels and towers and batteries and eroding roads with no maintenance"

As stated in Section 3.6 of the EIS, an assessment of decommissioning options and suitability will be undertaken at the completion of the proposed operating life of the Project (at Year 30). The assessment will determine whether the Project will be repowered as a solar farm using best practice and available technology at that time. The Applicant's commitment to this indicates the Project's longevity and is made evident by the detailed mitigation measures proposed to avoid, prevent and minimise potential impacts during its operating life.

Notwithstanding, the potential decommissioning and removal of site infrastructure at year 30 will be carried out in accordance with the DRP. The Applicant has committed to funding and executing the decommissioning of the Project. The Updated SAIA (Appendix J of the Amendment Report) supports the outcome that the implementation of mitigation measures during construction and operation will contribute to efficient decommissioning measures that would be effective at year 30 and no permanent negative impacts on agricultural resources or enterprises are expected. An Environmental Management System will also be established to ensure that appropriate measures and processes are in place to manage environmental risks and provide for continual improvement.

As required under the Large-Scale Solar Energy Guideline, the Applicant has entered a long-term agreement with the host landholders, which includes consideration of the cost, responsibilities, and scope of the decommissioning of the Project.

As part of this agreement, the Applicant is required to discuss with the landholder arrangements to set aside funding for decommissioning of the Project. Under the Draft Energy Policy Framework (DPE, Draft Energy Policy Framework, 2023c), a calculator has been provided to assist with calculating likely costs so that appropriate planning can occur for the decommissioning phase.

4.2.2.2 END-OF-LIFE RECYCLING

Twelve (12) submissions raised concerns regarding end-of-life recycling.

TABLE 4-20 PUBLIC SUBMISSIONS REGARDING END-OF-LIFE RECYCLING

Submitter ID	Example Text from Submission
SE-61051477	"The panels and supports are not renewable nor are they recyclable, once decommissioned, they will be put into landfill only to leach the toxic chemicals into our soils and water ways."
SE-61438482	"Recycling at the end of the lifetime is referred to as a simple 'end of life' statement, however the methodology and the true disposal is understated. It is a fact that all end of life for panels will not fall in thirty years. Evidence informs us that from the very beginning there will be inoperable components for whatever reason. Separation of components into recyclable and non recyclable does not adequately account for the destination of either product. Where do recyclables actually go and what is their end?"

Submitter ID	Example Text from Submission
	What processes are in place for non-recyclables? How is their destination protected from further contamination? How is their end costed in both monetary terms and in terms of 'carbon'?"
SE-61575707	"These issues are major concerns. The usable life of the solar panels and turbines is approximately 20 to 25 years and the proponents will have tailored their financing to a 25 year program. There must be strict requirements for rehabilitation backed by bank bonds to ensure compliance otherwise the foreign proponents will be able to simply walk away from any rehabilitation leaving the area as a deteriorating and rotting mess of derelict panels and towers and batteries and eroding roads with no maintenance."

A 2016 report by the International Renewable Energy Agency (IRENA) as part of the International Energy Agency Photovoltaic Power Systems (IEA-PVPS) identified that Australia was projected to generate over 140,000 tonnes/year of PV waste by 2030 (IRENA, 2016). It is understood that existing waste facilities would be pressured by this projected quantity, particularly as many utility-scale solar farms currently in operation will approach their end-of-life by this time, not just in Australia but around the world.

The efficacy of PV recycling/reuse is currently a global matter being resolved with emerging technologies being developed in parallel with the world's shift to renewable energy implementation. Up to 95% of materials used in construction of PV panels are recyclable where components may be broken down into productive materials such as additives for road base (UNSW, 2023a). As such, the recyclable/non-recyclable process for PV panels is in place and this will be discussed in detail in the DRP prepared by the Applicant, subject to emerging technologies and resource recovery infrastructure. For example, a patented recycling process developed by the University of New South Wales (UNSW) yielded a 99%-efficient recovery of silver from PV panels for reuse (UNSW, 2023b) which is known to be its most valuable component (IRENA & IEA-PVPS, 2016). A 2023 industry report by the Circular PV Alliance and University of Queensland made recommendations to propel a circular economy of PV recycling/reuse to be guided by policy and markets to achieve industry incentives much like how Australia's rooftop solar sector was stimulated in 2010 (Circular PV Alliance, 2023). Therefore, it must be understood that (1) there are existing processes in place which sort recyclable/non-recyclable materials from PV systems; (2) Australia has a recent history of rapidly implementing PV policy and incentivising industry and markets; (3) Australia is a world leader in PV research and (4) the Applicant is committed to implementing the appropriate processes as practicable under these circumstances.

4.2.3 JUSTIFICATION AND EVALUATION

Eighty-six (86) submissions related in support and twenty-two (22) submissions in objection were raised regarding the justification of the Project in accordance with relevant guidelines.

TABLE 4-21 PUBLIC SUBMISSIONS REGARDING THE JUSTIFICATION OF THE PROJECT

Submitter ID	Example Text from Submission
SE-61586959	"Bendemeer Solar Farm has always been playing a vital role utilising environmental energy resources. They have been producing materials which are believed to be very environment friendly and safe to use by mankind. With their project, they are saving the environment and providing resources that can be widely used by humans."

Submitter ID	Example Text from Submission
SE-61580247	"I fully support this project for its contribution in combating climate change, making the shift to renewable energy and the impact this will have on the Australian economy."
SE-61565247	"The path to decarbonising the Australian economy has been long and difficult. Quite separate to the shifting sands of government support or scepticism about the renewables industry, the process of developing, building and connecting projects has also been difficult. The result is that NSW, and Australia as a whole, will need to move quickly to rollout sufficient renewable energy generation to replace coal (and gas) fired power. The Bendemeer Project is a very large solar project which is not dependent upon the completion of the New England Renewable Energy Zone (which remains many years in the future). I fully support this project, and consider that it to be an essential part of NSW's transition to renewables"
SE-61553472	"I support this Project as it is a step towards a cleaner future. The success of this Project, not only commercially, but the positive social and environmental aspects brought on by the project, will set a great example for future renewable projects to follow. We are one of the few countries in the world that have the capacity to rely heavily on renewables, so we should be taking steps to increase our capacity to make this a reality. Although renewable energy isn't a perfect solution to the climate crisis, it is a step in the right direction, and the best tool we have to keep our way of life from drastically changing."
SE-61495223	"its about time the government got behind these projects and cut out a lot of the red tape. We need clean energy now not 20 years time. There will always be people apposed to any project but I let a few stop progress on what will be a good thing when power stations are closing they will be the first to complain when they have no power and they wont care where it comes from because it affects them directly"
SE-61390713	"I support the Bendemeer Solar Farm because it will provide a source of renewable energy to NSW."
SE-61370486	"Supplying Clean Green Energy is obviously the way to go forward if we ever hope to decrease our Carbon emissions. I see the Solar Farm as a win for the Region and a win for our Nation. I say "Power my world with Sunshine".
SE-61529254	"The Bendemeer Solar Farm includes a 150MW/300MWh Battery Energy Storage System (BESS). The advantages of BESS are that it will contribute to grid stability and will be able to release energy on demand when it is needed most. Effective, non polluting energy storage systems such as BESS are essential to achieve a stable, carbon neutral effective energy system."
SE-61438482	"Honest assessment of true cost of transmission is not and cannot be separated from including transmission. Access to transmission is vital and the costs of transmission must be included in the equation for without which there would be no project. In addition to transmission, the very necessity for a battery proposal confirms the inadequacy of solar to supply adequate energy to meet the known needs of community. Included in the assessment of the true cost of the project must include the cost of "Base Load Power"
SE-61487995	"We as a country are late coming to Wind and Solar, overseas have been there and found it unsatisfactory for running a country and manufacturing, the mess that has been left through their landscape we don't want hear either."
SE-61188498	"I don't believe that it has proven to be efficient or effective enough to warrant being placed in Bendemeer"

Submitter ID	Example Text from Submission
SE-61587231	"Opponents might argue that the money invested in the solar farm could be better used to improve the local energy grid or develop other renewable energy sources that could offer a more reliable and diverse energy supply"
SE-61584485	"They do not supply reliable power"
SE-61557958	"Currently there is no way that Australia can meet the unrealistic climate change target it is proposing without looking at the elephant in the room – Nuclear"
SE-61429209	"This project does not encourage sustainable and resilient building. Extensive mining has gone into the creation of the project materials which appear to be coming from overseas by way of the Ports of Newcastle and Brisbane. This project has an expected life of 30 years however, it can not be expected that great leaps in technology will not have resulted in a far better energy source with a smaller footprint in the next few years rendering this project unviable and therefore a waste product."

The Australian continent has the highest solar radiation per square metre of any continent and consequently some of the best solar energy resource in the world. Solar panels can generate electricity during daylight hours, even where there is cloud cover. Nuclear energy is not currently considered as part of the NSW Net Zero Plan as an option to replacing coal fired powerplants within Australia. Beyond capital costs, the timing for the development of nuclear energy infrastructure within Australia, and the development of a legal framework to allow permissibility, also presents a constraint (CSIRO, 2023). Renewable energy is therefore the preferred method for energy transition away from fossil fuels by the NSW and Australian Governments.

Renewable energy is the key focus on the NSW Net Zero Plan, with the Electricity Infrastructure Roadmap outlining the need to provide multiple forms of renewable energy and energy storage systems to replace coal fired power plants. As stated in Section 1.4 of the EIS, the key objective of the Project is to support the Australian energy sector transition away from fossil fuel dominated generation, in accordance with the Australian Energy Market Operator (AEMO) Integrated System Plan (ISP) 2022. The ISP identifies the location of renewable energy zones (REZs) to connect to existing transmission infrastructure and therefore allow for the retirement of Australia's long-term coal fired plants.

Community submissions highlighted community support and appreciation for the transition to a renewable and sustainable energy generation solution. The size and the capacity of the Project was also considered a positive benefit, with the BESS providing stability to the grid and the Project providing a reliable alternative electricity solution. The Project includes a BESS to store excess power generated to aid in energy firming and to balance the network for electricity demand during nighttime hours. The inclusion of the BESS with the Project provides an opportunity to help stabilise energy supply to meet peak electricity demands. Therefore, the BESS will help to stabilise the grid, increasing the reliability and stability as well as providing a dispatchable energy resource. The Project will overall contribute to the implementation of the NSW Electricity Strategy, which seeks to establish a reliable, affordable and sustainable electricity future for NSW.

The Applicant has aligned the design of the Project and the development of the EIS with the requirement of the Large-Scale Solar Energy Guideline:

- Alignment with relevant zoning and permissibility requirements (refer **Section 4.2.1.2**);

- Has obtained consent for the Project development from the landowner;
- Mitigation of significant environmental, social or economic issues (refer Appendix B of the Amendment Report);
- Assessment under the EPBC Act;
- Robust community engagement (refer Chapter 5 of the EIS and **Section 3** of this report);
- Site selection that considered proximity to existing infrastructure, available connection capacity, solar radiation levels, proximity to energy users, proximity to major roads and transport infrastructure, a single landowner and compliance with the and use zoning in proximity to regional cities (refer **Section 4.2.1.2**);
- Adjustment and design iterations of the Project to reduce impacts and adjust to various environmental and social constraints; and
- Adherence to assessment requirements for the assessments (refer to **Section 4.2.4.2**).

The Project is consistent with the principles of ecologically sustainable development. The Project has evaluated environmental impacts and where practicable these impacts have been avoided, mitigated or offset.

The Project justification is discussed further in **Section 5**.

4.2.4 PROCEDURAL MATTERS

4.2.4.1 LEVEL AND QUALITY OF ENGAGEMENT

There were thirteen (13) submissions received that raised concerns about the lack of engagement with impacted parties; however, ten (10) submissions were received that praised the overall level of engagement that was carried out for the Project by the Applicant.

TABLE 4-22 PUBLIC SUBMISSIONS PERTAINING TO THE LEVEL OF ENGAGEMENT

Submitter ID	Example Text from Submission
SE-61588239	"The extended community consultation and engagement with the Bendemeer community, commitment to a community contribution fund and engagement with Registered Aboriginal Parties I believe are good indicators that the project developers are taking the project social license seriously."
SE-61508460	"I support the project primarily ... because of the diligence applied in community consultation and undertaking the necessary studies and planning."
SE-61326724	"The project has been revised and refined over time in response to regulatory guidelines, landowner feedback and community consultation."
SE-61551209	"I've attended a number of BREH public information events and spoken to various persons staffing them. In every instance I received an interested informative and factual response to all my questions and was made to feel valued, and I've read their literature outlining the project, and I've also perused the published EIS. I've also managed to speak to opponents of the project and heard their concerns leading to their opposition including reading some of their published material. Aside from some understandable points of view relating to neighbouring visuals, their main issues appear to simply be emotive and unreasonable with many of their fears able to be dismissed if they were to read the EIS."
SE-61538207	"I feel that they have mitigated the concerns of the community through regular pop-ups and appearances at the CWA hall."
SE-61326724	"The project has been revised and refined over time in response to regulatory guidelines, landowner feedback and community consultation. As a local

Submitter ID	Example Text from Submission
	business owner and community leader I have spoken to various residents in this catchment and the overwhelming response is that the community engagement and availability for questions has been high."
SE-61224707	"Metis has already shown commitment to the town through sponsoring local events and showing active interest in supporting the people."
SE-61132973	"I have carefully been following the project in Bendemeer and feel that the company responsible has taken every correct channel with communicating with the community there, as well as reaching out to the Business Chamber in Tamworth too."
SE-61043707	"Strong community engagement has been undertaken, with the Applicant being available to answer questions and converse with all local community members and organisations for close to two years. They actually care, rather than doing the bare minimum, which has been seen in their willingness to have discussions with groups from both sides of the fence"
SE-60928223	"Metis have engaged with the community over an extended period, allowing for genuine community engagement and utilising local personnel to provide this engagement."
SE-61236712	"I have been aware of the project team consulting on a regular basis within the community, as well as committing to an annual contribution to the community for the lifespan of the projects"
SE-61568505	"There have been no fruitful discussions regarding how I will access and to continue to operate my farming business."
SE-61555711	"a few neighbouring properties met with Athena employees, due to numerous inconsistencies with their information supplied to the surround affected neighbours that we learnt, communications with one neighbour have been going on for 4 years. How can this be? You want to ruin our lives and the community and consultation starts with being untruthful."
SE-61531962	"an A4 sized map on the local shop counter was how we were informed of the project, any information since has been obscure, repetitive and contradictory"
SE-61488279	"The community & adjoining Neighbours need to be able to have a say about what they have in their backyard."
SE-61418223	"The project team has been speaking with the closest neighbours on the Western end of the project regarding a proposed neighbour agreement however this isn't listed in the Proposal, I am concerned that this was all smoke and mirrors due to having no faith in the project team. We are consistently being let down by the Project team, with regards to incorrect information, the team not taking on board our concerns and questions"
SE-61426965	"Community consultation-I only knew of two pop up sessions which I was told about by a neighbour. First meeting people asked questions they couldn't answer. Saying people support this project is quite a statement. People have been keeping away from them."
SE-61396221	"we have only heard from spokespersons from multinational companies who don't live here and would not be affected by the large scale industry that is going to be plonked in our beautiful back yard."
SE-61102748	"There are so many more lies about the project they wouldn't answer or changed course of the conversation."
SE-60960724	"the lack of communication – The EIS is incorrect when it mentions the communication."

The high level of community engagement that was carried out by the Applicant was highlighted through the support of the Project. In particular, the high level of engagement and

incorporation of community feedback within the Project, the sponsoring of local community groups and continued information sessions that were held to address community concerns.

The Applicant has conducted significant community engagement throughout the EIS process to keep the community aware of the Project. Since conception of the Project, a total of 457 stakeholders have been engaged, including 339 individuals and 118 organisations. A total of 1,968 interactions have taken place using various communication methods. These have all been recorded using a dedicated Project Stakeholder Engagement software system. As stated in Section 5 and Appendix E of the EIS, the community engagement that has been conducted to date includes (but is not limited to):

- Nine (9) face to face meetings with the host landowner and fifty-three (53) meetings with non-associated landowners;
- Two (2) group sessions held at properties neighbouring the Project;
- Three (3) virtual meetings were held with the host landowner, as well as 250 individual interactions via phone and email;
- Fifty-three (53) face to face meetings within non-associated landowners and two group face to face sessions;
- Social impact assessment focused engagement conducted in February 2023;
- One hundred and twenty-seven (127) interactions over phone with six (6) non-associated landowners (that own the three (3) dwellings identified to be present within the assessment area);
- Email correspondence in response to a letter received from SOS Bendemeer Action Group, which included a Project fact book and the offer of an in-person meeting;
- Regular emails and phone calls (on average one (1) email per week and two (2) calls per week) through the community hotline;
- Five (5) meetings were held with community groups;
- Twelve (12) community information sessions;
- Establishment of a Community Hub that ran from April 2023, located at the Bendemeer CWA Hall;
- Project Information stands were set up at the Grey Fergie Tractor Muster 2022 and the Bendemeer Campdraft and Rodeo 2023, where fact sheets and information were distributed;
- Local Registered Aboriginal Parties (RAPs) were engaged through an advertisement in the *Northern Daily Leader*, and letters were sent to fifty-six (56) parties that were identified by Heritage NSW and the North West Local Land Service (LLS);
- Two (2) representatives from Tamworth Local Aboriginal Land Council (LALC) and four (4) representatives from AT Gomilario Cultural Consultancy participated in the Aboriginal Cultural Heritage field surveys;
- Engagement with infrastructure owners (Transgrid and EnergyCo) through emails, and technical meetings;
- Regulatory engagement via email to provide Project updates with DCCEE Water, DPI Agriculture, Heritage NSW and North West LLS, NSW EPA, NSW RFS, FRNSW, MEG, Crown Lands, TfNSW and Natural Resources Access Regulator (NRAR);

- On-going engagement with NSW DPHI through videoconference, phone call, email and briefing;
- Face to face meetings, phone call and email correspondence with TRC between May 2022 and May 2023; and
- In person meetings with the NSW Member for Tamworth, Minister for Lands and Water, Minister for Hospitality and Racing, Shadow minister for Gaming and Racing, Shadow Minister for the Arts and Heritage, NSW Member for Northern Tablelands, and Federal Member for New England.

Since the exhibition of the EIS, the Applicant has continued engagement with the landowner, Community, neighbours and Indigenous groups to manage concerns that were raised during the EIS consultation process. Additional engagement is discussed in **Section 3.1**, and Section 5 of the Amendment Report.

The Project team has provided comprehensive and transparent information to the community through the described activities. All engagement conducted with the community during the preparation of the EIS has been fulfilled in accordance with the NSW Government's *Undertaking Engagement Guidelines for State Significant Projects* (2021).

Since the EIS submission, additional consultation has been conducted to address community concerns, including:

- Phone calls and emails with landowner and non-associated landowners to discuss Project updates, development approval process and Project amendments;
- Face-to-face meetings with non-associated landowners at neighbouring properties;
- Monthly newsletters distributed to mailing list of 221 subscribers;
- Community Hub held weekly at Bendemeer CWA Hall; and
- Addressing enquiries through community phone hotline and email address.

4.2.4.2 LEVEL AND QUALITY OF ASSESSMENT

There were ten (10) submissions received that supported the level and quality of assessment, and a further thirteen (13) that expressed concerns about the adequacy of assessments completed.

TABLE 4-23 PUBLIC SUBMISSIONS REGARDING THE LEVEL AND QUALITY OF ASSESSMENT CONDUCTED

Submitter ID	Example Text from Submission
SE-61588486	"The proposed project site has had alterations to minimise potential biodiversity impacts, is designed to promote engagement in mixed agriculture practices, and a transmission line is already running through the property. These factors are evidence of the overall positive benefits of the project."
SE-61236712	"I am based in Tamworth and support the Bendemeer Solar Project as I feel it aligns with the Government and Energy Co's plans for Renewable Energy in NSW. I feel that the project team has thoroughly assessed all environmental, heritage, noise and visual impacts to the best of their abilities."
SE-61538207	"I support the Bendemeer Solar project. I feel that the team managing the project has been very transparent and has completed all studies to the best of their abilities."

Submitter ID	Example Text from Submission
SE-61224707	"The EIS is comprehensive, and I think demonstrates that Metis take their environmental responsibility seriously, making any changes as necessary to ensure compliance and consideration for any locals or the local environment that would be impacted."
SE-61160977	"The solar project is highly regulated in its construction and the EIS outlines very clearly and in detail about the mitigation of sedimentation."
SE-61236712	"I feel that the project team has thoroughly assessed all environmental, heritage, noise and visual impacts to the best of their abilities."
SE-61484754	"Stringent offset measures and high level of regulatory processes through state and federal planning laws should ensure the solar farm is constructed and run with a very low risk of adverse economic, social, and environmental impacts."
SE-60928223	"The comprehensive EIS shows the project has taken its responsibilities seriously and has made significant adjustments to the project to comply with the Solar Design guidelines."
SE-61009460	"The developer has thoroughly assessed the project in the most professional and transparent way, protecting natural flora and fauna and keeping the local community engaged and in mind at every step"
SE-61575707	"The key findings of the Environmental Impact Statement ("EIS") are seriously flawed and appear to be driven by self-interest rather than genuine environmental concerns."
SE-61539209	"We were advised a team would conduct sound tests at our residence by the Athena team. We have not had anyone on our property testing for sound so how can they determine we are a low impact."
SE-61343213	"Has there been any real study done on how it will affect wildlife and endangered species which are already under pressure"
SE-61587711	"Why is the environmental impact study only required in the planning stages, and then "managed" as part of the approval."
SE-61439218	"There is inadequate identification of the true cumulative impact. Without adequately identifying the extent of the potential impact on individuals in particular, their businesses and the flow on effect on their productivity and viability, there is no depth of understanding and no hope of proper management"

The EIS has been prepared by suitably qualified, independent and experienced professionals. The EIS address the NSW Government SEARs requirements and was prepared in accordance with the NSW DPE Guidelines for SSD and the NSW DPE Large-Scale Solar Energy Guidelines (refer Appendix A of the EIS). The EIS has also been prepared in accordance with relevant federal, state or local guidelines. The quality of the assessment that has been conducted was praised by numerous submissions that were received in support of the Project, particularly for the visual and noise assessments (as discussed in the sections below).

Detailed technical studies that informed the EIS (e.g., for biodiversity, aboriginal and cultural heritage, noise, visual, soils and agriculture, hydrology, traffic, preliminary hazard analysis (PHA), bushfire, economic and social impacts) were prepared by recognised and suitably qualified specialists.

All these specialists have significant experience in assessing potential impacts for large scale renewable energy developments in NSW. All technical assessments were undertaken in

accordance with relevant guidelines. The biodiversity assessment was undertaken in accordance with the BAM, with a BAM Accredited Assessor completing the study.

Additionally, the EIS was reviewed by an independently certified Registered Environmental Assessment Practitioner (REAP). The role of the REAP is to ensure that the EIS is prepared to the necessary standard and includes all the required information for the DPHI to assess the Project.

4.2.5 ENVIRONMENTAL, SOCIAL AND ECONOMIC IMPACTS

In response to submission received, additional biodiversity, noise, visual, traffic, social, agricultural and economic assessments (among the others that were listed in **Table 3-4**) have been undertaken to inform this Submissions Report and the Amendment Report. The results of these assessments are discussed in relation to the specific concerns in the sections below.

4.2.5.1 BIODIVERSITY

Habitat Loss

There were forty-two (42) submissions raising concerns to land clearing and the resulting habitat loss from the Project, while three (3) praised the efforts taken to practicably retain native vegetation.

TABLE 4-24 PUBLIC SUBMISSIONS REGARDING HABITAT LOSS

Submitter ID	Example Text from Submission
SE-61588239	"I'm glad to see that the proposed project site has had alterations to minimise potential biodiversity impacts."
SE-61388227	"The project has taken into account biodiversity impacts and created a native vegetation corridor through the project area."
SE-60928223	"The project design has been adjusted to avoid significant biodiversity areas. This avoidance essentially establishes a biodiversity corridor from the Macdonald river through to the oxley highway."
SE-61575995	"NOT cleared will require the felling of trees, removal of top soil and animal habitat"
SE-60625993	"To build the solar farm in the proposed location would be to destroy agricultural land and natural habitat of threatened native species such as koalas. This loss of biodiversity would have dire effects on the natural environment."
SE-61605220	"vast ecological destruction during building and subsequently when these systems fail and hardware has to be disposed of."
SE-61584957	"Destruction of habitats for endangered and at-risk Flora and Fauna,"
SE-61522710	"They will knock all the trees down and kill the wildlife they have said they will shake the wildlife from the trees too get them down"
SE-61188501	"The landscape will be cleared from trees and vegetation that the wildlife depend on"

Submitter ID	Example Text from Submission
SE-61418223	"On page 17 of the submission it shows the volume of native vegetation that will need to be cleared (PC10), how can clearing this volume of native vegetation be environmentally friendly or sustainable? Where will the animals that live and travel through this area of land go, will they be killed during the destruction of this land? The endangered pygmy possum and sugar gliders how will they be cared for and relocated? There are at least 2x pairs of Wedge Tailed Eagles which nest and live in the proposed habitat which is marked to be cleared, this won't be positive for this protected species. How many native, endangered species will be lost when their habitat is cleared, Koalas, Quolls, Wedge Tail Eagles? Unfortunately the EIS would have only collected data for native fauna and flora in particular areas, there would be so much of this land which would not have been studied, due to such a large area of land being proposed for clearing."
SE-61420238	"The proposed solar farm will...potentially affect the habitat and survival of many wildlife animals including recently introduced Bell turtles and platypus. Wildlife such as koalas and bats will become displaced as land is cleared for the solar farm site."
SE-61208213	"If the solar goes ahead and then contaminates the river what a loss the township will lose...natural habitats for all animals including the protected Bells turtles, platypus, Murray cod and other wild life."
SE-60960724	"How is it that these kind of people can bulldoze down many, many hectares of over 100 year old trees on a property where as the average farm is so restricted by what they can cut down."
SE-60946472	"Old trees will be cut down and what about the eagles that we see fly into those trees. Where will they live when they are cut down?"
SE-61535052	"the project wants to clear essential trees and significant environment areas."
SE-61418237	"there are concerns of all the trees and wildlife in that area, what is going to happen to all the animals!! No to clearing the trees! We need more trees not clearing them!!"

The Project Area has been refined in response to the outcomes of the BDAR, with iterative design changes during the EIS phase made to avoid, minimise and mitigate impacts. Numerous submissions received in support of the biodiversity assessment recognised the efforts of the Applicant to reduce the biodiversity impact.

The Project Area is primarily agricultural land which has been previously disturbed and cleared for agricultural activities. The Project development has considered impacts to biodiversity and threatened species through design iterations and revisions made to avoid, minimise and mitigate impacts to critical habitats. The Project's Disturbance Footprint originally consisted of an area of 680 ha. As ecological surveys and vegetation community mapping was completed across the Subject Land, areas of constraints were identified and mapped, including a large section of the Project Area containing Box Gum Woodland TEC. In summary, the following layout changes to avoid areas of Box Gum Woodland TEC since the initial design include:

- The overall Disturbance Footprint has been reduced by 46% from the initial 680 ha to the current 369.2 ha which is a total avoidance of 310.8 ha;
 - The current 369.2 ha Disturbance Footprint has been reduced by 23% from the 476.6 ha assessed in the EIS (further avoidance of 107.4 ha);
- The impact area of BC Act listed Box Gum Woodland TEC within the Disturbance Footprint has been reduced by 64% from the initial 154.5 ha to the current 55.3 ha which is a total avoidance of 99.2 ha;

- The current 55.3 ha impact to BC Act listed Box Gum Woodland TEC is a 47% reduction from the 103.8 ha assessed in the EIS (avoidance of 48.5 ha);
- The impact area of EPBC Act listed Box Gum Woodland TEC within the Disturbance Footprint has been reduced by 76% from the initial 97.4 ha to the current 23.8 ha which is a total avoidance of 73.6 ha;
 - The current 23.8 ha impact to EPBC Act listed Box Gum Woodland TEC is a 61% reduction from the 60.3 ha assessed in the EIS (avoidance of 36.5 ha).

There are regional, sub-regional and local level fauna corridors mapped within the Project Area. This corridor has been largely avoided by the Project design to ensure that connectivity between the regionally and sub-regionally mapped fauna corridors remains for species that may use this habitat.

For the area of corridor within the Project Area that cannot be avoided, an equivalent biodiversity offset will be implemented in accordance with the NSW Government Biodiversity Offset Scheme. Additional measures that will be employed to mitigate the loss of habitat include:

- Staged habitat removal before and during the construction phase;
- Fauna rescue and relocation during the clearing of habitat trees;
- Habitat salvage; and
- Habitat compensation as part of the Biodiversity Management Plan.

The Project has sought to avoid impacts to habitat through placing Project infrastructure in disturbed grasslands as much as practicable, hence minimising disturbance to native vegetation. Native vegetation clearing will be restricted to land within the Disturbance Footprint. While piling for solar array footings and trenching for underground cabling will be the keystone activities, civil works for other permanent infrastructure such as fencing, internal roads and buildings will require ground disturbance. The full extent of construction activities will be established upon detailed design. It is expected that after topsoil is returned upon completion of works, pre-existing groundcover will become re-established.

Where PCTs have been cleared, larger, higher quality patches of vegetation, along with the surrounding connectivity of habitat within the wider regions, have been prioritised for avoidance to allow continued foraging, breeding and sheltering habitation for some woodland species, such as birds, arboreal mammals and microchiropteran bats.

The location of the Project in proximity to existing transmission infrastructure also reduces the need to clear additional habitat to connect to the electrical grid.

Threatened Species

There were seventeen (17) submissions relating to the impacts to threatened species.

TABLE 4-25 PUBLIC SUBMISSIONS REGARDING THREATENED SPECIES

Submitter ID	Example Text from Submission
SE-61588494	"Species assessed were only those endangered, what about the existing species on the property such as the echidnas, native birds, lizards, koalas etc that are currently living in the habitat. They are not going to utilise the wildlife corridor if traffic, lights, noise and fencing impacts their movements."

Submitter ID	Example Text from Submission
SE-61575707	"The McDonald River is a very well-preserved riverine environment and is home to what is considered to be the largest Platypus population in the country. Toxic run off from the initial work and degrading solar panels will potentially seriously impact this river now and in the future."
SE-61426965	"No assessment if bird life done. Willy wagtails and peewees fight their reflection in these panels. There is an endangered species of bird in Bendemeer which is found in wooded Grasslands-Diamond Firetail-which I have seen and is documented by Tamworth Bird Watchers.... They are going to kill WhiteBox, Yellow box and Blakely's Red Gum which are on the critically endangered list. Their own study said they are going to cause "a serious and irreversible impact to BoxGum Woodland"
SE-61420238	"The proposed solar farm will be located too close to a main river which is also the towns' main drinking supply, potentially affecting the habitat and survival of many wildlife animals including recently introduced Bell turtles and platypus. Wildlife such as koalas and bats will become displaced as land is cleared for the solar farm site."
SE-61539209	"Animals such as the endangered Bell's Turtle are native to the Northern tablelands river systems, in particular the McDonald River where projects have taken place to aid in their survival. This Solar project jeopardises this endangered Bell's Turtle's future in the magnificent Bendemeer, McDonald River system. There will also be direct impacts to bird life, like the protected wedge tailed eagles. Other animals in threat include but are not limited to the wombats, possums, frogs, Echidnas, Kangaroos, Platypuses and plentiful fish species just to mention a few"
SE-61482457	"The project site will need clearing of hundreds of trees and destroy koala habitat and other animals – the EIS also explains that it is expected many animals will die of starvation – how is this green energy?"
SE-61426965	"No sightings of koalas-they only looked autumn and winter. Everyone in Bendemeer know we have koalas plus the trees they are clearing are koala habitat."
SE-61169004	"The river has beautiful wild life including many birds, fish such as Murray cod, rainbow and brown trout, bell turtles (protected species), platypus, craybobs, frogs and many more."
SE-61426965	"How green is this-killing 600ha of trees which sequester carbon Grey headed flying fox eats nectar and flowers of these trees No assessment if bird life done. Willy wagtails and peewees fight their reflection in these panels. There is an endangered species of bird in Bendemeer which is found in wooded Grasslands-Diamond Firetail-which I have seen and is documented by Tamworth Bird Watchers Does the government really think it is ok to kill flora and fauna to help 'green' Australia They are going to kill WhiteBox, Yellow box and Blakely's Red Gum which are on the critically endangered list. Their own study said they are going to cause "a serious and irreversible impact to BoxGum Woodland" They are leaving a corridor of trees from the river to the BESS. Why? So they can get zapped."
SE-60988961	"Koalas are beginning to return the area and have been sighted in local woodlands and destruction of habitat will result in loss of these and other wildlife"
SE-61535035	"The project would have a detrimental effect on wildlife, particularly koalas who are already endangered."

Submitter ID	Example Text from Submission
SE-61439779	"I am concerned about the impact on our native species of Bells Turtles and platypus in the Macdonald River"
SE-61252959	"The native animals in the area will be severely impacted by the solar ... farm. There are flying foxes present which are protected, koalas on site as sighted, baby platypus, baby bells turtles and many other wildlife being displaced."
SE-61429209	"How is it possible to justify the removal of habitat that can in anyway impact the Squirrel Glider (listed as vulnerable), Eastern Pigmy Possum (listed as vulnerable) and Tusked Frog (engangered)?"

The BC Act requires that any SSD projects must assess biodiversity impacts through a BDAR (Section 6.10). A BDAR is prepared through the application of the biodiversity assessment method (BAM), which sets out a consistent method to assess impacts on threatened species and threatened ecological communities, their habitats, and impacts on biodiversity values. The BDAR also provides guidance on the minimisation and avoidance of identified impacts.

All flora and fauna species listed as critically endangered, endangered or vulnerable under the BC Act or EPBC Act, and whether they are SAI entities have been assessed in the BDAR, with those species likely to be present assessed in accordance with the NSW biodiversity assessment process guidance.

The surveys completed during the EIS and submissions phase considered biodiversity impacts to threatened, endangered and vulnerable species under the EPBC Act and BC Act (refer Appendix E of the Amendment Report). These surveys were used to inform the BDAR determined that there was no habitat considered suitable for the Bell's Turtle (*Myuchelys bellii*), platypus and other listed species. It is therefore considered unlikely that the Project will impact upon these species.

Koalas and Grey Headed Flying Fox

The Project Area has been surveyed extensively during the ecological assessment and no resident koala or grey headed flying-fox populations, or evidence of breeding individuals were identified within the Subject Land. And as such the habitat cannot be considered core koala habitat under the Biodiversity SEPP 2021. Targeted survey effort to detect this species was conducted as part of the BDAR, which concluded low potential presence of koala habitat and that there was no habitat within the Project Area considered critical for the grey-headed flying fox. No Grey-headed Flying-fox were observed during field surveys undertaken from 2021 to 2023.

A significant impact assessment for the koala (refer Section 7.4 of the Updated BDAR (refer Appendix E of the Amendment Report) concluded that the current Project layout and design has the potential to disturb 55.3 ha of potential foraging and breeding habitat for the Koala and Grey-headed flying fox. In a regional context this amounts to a potential 0.04% loss in the New England Tablelands Bioregion. This is a small proportion of habitat to be removed in relation to the larger context of habitat available in the locality.

The habitat within the Project Area is highly disturbed because of farming practices and previous clearing and there is a larger network of quality Koala habitat in the locality. Therefore, the Project will not modify, destroy or decrease the availability or quality of habitat to the extent that the species will decline.

The BDAR noted the presence of two Grey-headed Flying-fox camps within 50 km of the Project Area, one located in Bendemeer (listed as 'Other Flying-fox Camp'), and the other located in Tamworth (listed as a 'Nationally Important Flying-fox Camp'). Large contiguous areas of Grey-headed Flying-fox foraging habitat exist between the Project Area and nearby camps. At the closest camp (located at Bendemeer), the most recent Grey-headed Flying-Fox activity recorded is from February 2022 (DCCEEW, 2023). Aside from this record, data at this camp has shown it to be vacant for the past 10 years of monitoring, including during the most recent monitoring round. It is concluded that this camp is used as a temporary roost and not a permanent camp. The Nationally Important Flying-fox Camp in Tamworth is approximately 40 km south-west of the Project Area and records annual numbers of individuals in the thousands (DCCEEW, 2023). The lack of data in the Bendemeer camp during the same periods suggests that this camp is bypassed in preference to Tamworth and others, and likely only facilitates temporary foraging habitat.

White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland

Large areas of Box Gum Woodland TEC within the Project Area have been avoided through the iterative design process undertaken for the Disturbance Footprint as described earlier in this **Section 4.2.5.1** which details the substantial areas of this TEC retained as a native vegetation corridor. The 23.8 ha impact area of EPBC Act listed Box Gum Woodland TEC is wholly within that of BC Act listed Box Gum Woodland TEC, where the total clearance area of Box Gum Woodland TEC is 55.3 ha.

Although Box Gum Woodland TEC is identified as a SAII entity in the BC Act, the Project has avoided much larger areas of this TEC throughout the Project Area. Avoidance has been achieved through the iterative design process adopted by the Applicant throughout the EIS assessment phase and post-EIS exhibition. A summary of the measures to avoid areas of Box Gum Woodland TEC include:

- The overall Disturbance Footprint has been reduced by 46% from the initial 680 ha to the current 369.2 ha which is a total avoidance of 310.8 ha;
 - The current 369.2 ha Disturbance Footprint has been reduced by 23% from the 476.6 ha assessed in the EIS (further avoidance of 107.4 ha);
- The impact area of BC Act listed Box Gum Woodland TEC within the Disturbance Footprint has been reduced by 64% from the initial 154.5 ha to the current 55.3 ha which is a total avoidance of 99.2 ha;
 - The current 55.3 ha impact to BC Act listed Box Gum Woodland TEC is a 47% reduction from the 103.8 ha assessed in the EIS (avoidance of 48.5 ha);
- The impact area of EPBC Act listed Box Gum Woodland TEC within the Disturbance Footprint has been reduced by 76% from the initial 97.4 ha to the current 23.8 ha which is a total avoidance of 73.6 ha;
 - The current 23.8 ha impact to EPBC Act listed Box Gum Woodland TEC is a 61% reduction from the 60.3 ha assessed in the EIS (avoidance of 36.5 ha).

The amended Project layout prioritise the retention of the higher quality areas of Box Gum Woodland TEC, with the majority (66%) of the TEC that occurs in moderate condition retained.

The Amended Project layout further mitigates these impacts via management measures during construction to delineate and protect areas for retention, pre-clearing surveys followed by staged clearing, fauna rescue and habitat salvage, weed and pest management as part of the

Biodiversity Management Plan including a Vegetation Management Plan. Refer to Section 7.5 of Appendix E of the Amendment Report (ERM, 2024) for the complete suite of mitigation measures.

The Applicant has committed to implementation of voluntary conservation measures to mitigate impacts to Box Gum Woodland TEC, through the dedication of areas of retained vegetation as a Voluntary Biodiversity Stewardship Site. A Management Plan will be prepared for these areas that provides for the assisted regeneration of 74.0 ha of Box Gum Woodland, and 27.7 ha of active restoration of non-woodland areas. Through these measures there will be a net benefit to Box Gum Woodland, providing for management under a voluntary Biodiversity Stewardship Site with a 1:1.8 ratio of impacted to improved/enhanced areas within the Project Area. These voluntary conservation measures are in addition to the offset obligations to be addressed through the BOS, and other mitigation measures proposed to minimise impacts to biodiversity values.

Adequacy of Assessment

There were three (3) submissions raised that voiced concerns about the adequacy of the assessment that was considered.

TABLE 4-26 PUBLIC SUBMISSIONS REGARDING ADEQUACY OF ASSESSMENT

Submitter ID	Example Text from Submission
SE-61575707	"Biodiversity has not been properly addressed."
SE-61343213	"Has there been any real study done on how it will affect wildlife and endangered species which are already under pressure? eg rare duck billed platypus"
SE-61429209	"There is no mention of birds at all – why is this? Most birds nest in trees how will removing hundreds of trees not impact them? Why is there no environmental section with regards to birds and the impact this development will have on them?"

The BDAR was prepared in accordance with Part 4 of the EP&A Act as well as assessment under the EPBC Act due to the Project being determine a controlled action (2022/094444) for potential impacts to listed threatened species and ecological communities.

The BDAR was also prepared in accordance with the BAM 2020 and certified by a BAM Accredited Assessor. The BDAR assessed all species listed under the BC Act and EPBC Act, and included extensive survey efforts to ground truth flora and fauna species present with the Project Area.

Habitat for nesting birds was assessed as part of the BDAR process, with impacts from habitat loss considered and accounted for. There was no habitat identified that required further assessment for listed species.

4.2.5.2 HERITAGE

Aboriginal Cultural Heritage

There was one (1) supporting and three (3) objecting submissions raised regarding impacts to Aboriginal Cultural heritage values.

TABLE 4-27 PUBLIC SUBMISSIONS REGARDING IMPACTS TO CULTURAL HERITAGE

Submitter ID	Example Text from Submission
SE-61588239	"The extended community consultation and engagement with the Bendemeer community, commitment to a community contribution fund and engagement with Registered Aboriginal Parties I believe are good indicators that the project developers are taking the project social license seriously"
SE-61535092	"I am a local Aboriginal elder born & raised in Bendemeer, my son did the aboriginal heritage study on the property the Solar farm will be built on.... My son also felt he was rushed during the inspection therefore a more through investigation needs to be performed... we think the study was not done properly and needs to have a much more intensive study done as there could be sites on the land that my people used as burial sites and campsite""
SE-61343213	"This is tribal land and a major sacred site to me as my Countries dreaming place! Do you have permission from appropriate aboriginal land council ?"
SE-61429209	"Why does this state there are no Aboriginal Cultural Heritage sites when the Biodiversity map shows there is an Aboriginal Heritage Site (AHS) – what is the difference and why does AHS not appear to matter?"

Public community submissions recognised the extensive consultation that was conducted with the local Registered Aboriginal Parties (RAPs) as part of the EIS process. As stated within Section 6.3 and Appendix H of the EIS, the Aboriginal Cultural Heritage Assessment Report (ACHAR) was conducted in accordance with all relevant state and federal guidelines, including:

- Code of Practice for the Investigation of Aboriginal Objects in New South Wales;
- Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW; and
- Aboriginal cultural heritage consultation requirements for Applicants.

During the assessment process, a consultation log and record of advertising in the *Northern Daily Leader* were included as part of the assessment process:

- Local RAPs were engaged through an advertisement in the *Northern Daily Leader*, and letters were sent to fifty-six (56) parties requesting an expression of interest to be consulted;
- There were nine (9) groups or individuals that registered to be consulted as RAPs; and
- Two (2) representatives from Tamworth LALC and four (4) representatives from AT Gomilaroi Cultural Consultancy participated in the Aboriginal Cultural Heritage field surveys.

Culturally significant sites were considered during the design of the Project where two (2) two (2) PADs were identified during the field survey and are avoided by the Disturbance Footprint. There were no registered AHIMS sites within the Project Area. Key mitigation measures that will be employed by the Project include the fencing of the two (2) PADs, and through the implementation of erosion and sediment control measures around the sites.

The amended Project layout maintains avoidance of the two (2) PADs which are not within the amended Disturbance Footprint. The existing mitigation measures to protect these PADs will

apply while other impacts will be managed through the implementation of an Aboriginal Cultural Heritage Management Plan.

RAPs were notified of the proposed amendments to the Project and were provided the required consultation period for comment. No comments were received.

Historic Heritage

There were one (1) submission regarding historical heritage impacts.

TABLE 4-28 PUBLIC SUBMISSIONS REGARDING IMPACTS TO HISTORIC HERITAGE

Submitter ID	Example Text from Submission
SE-61429209	"Bendemeer Station is a local landmark only a few hundred metres from the proposed industrial site. It is heritage listed. How is it considered unlikely the project will impact on the significance of the Station? This report claims it is of no aesthetic value – it is however of value to the people who value this area and placing a large scale industrial plant over the hills almost on top of the Station is unacceptable."
	"So many historical buildings in Bendemeer and will all be in such close proximity to the solar development. Bendemeer Station will be impacted for the negative effect on its farm stay accommodation if for nothing else as extremely close to this development"

Additional assessment for Bendemeer Station was undertaken in the contexts of historic heritage values (refer Appendix D of the Addendum to LVIA) and visual amenity (refer Appendix I of the Amendment Report). Bendemeer Station is 760 m west of the Project Area and is listed as an item of local heritage significance under Schedule 5 of the Tamworth Regional LEP (item I096) described as "Bendemeer" Station, "Bendemeer" Station Graves and "Bendemeer" Station Woolshed'. The State Heritage Inventory (SHI) also lists the "Bendemeer Station – Blacksmiths Store" within the curtilage of I096 however this component is not listed in Schedule 5 of the LEP. It is noted that the original homestead of item I096 no longer exists and stated in the SHI that this reduces the significance of the site. The memo assessment of Bendemeer Station concluded that the Project is unlikely to result in indirect impacts to the values of the item given its distance, and significance is not related to aesthetic values (refer Appendix D of the Addendum to LVIA).

Regarding visual amenity and aesthetics, the Addendum LVIA assessed potential views to the Project from Bendemeer Station with a detailed visual impact assessment using both wireframe analysis and photomontage from the worst-case representative viewpoint (R394). The assessment was undertaken in accordance with the Large-Scale Solar Energy Guidelines which resulted in a 'low' visual impact rating considering the existing topography and vegetation, and distance to the Project.

4.2.5.3 NOISE

Construction and Operational Noise

There were two (2) supporting and eight (8) objecting submissions that were raised regarding impacts from both the construction and operation of the Project.

TABLE 4-29 PUBLIC SUBMISSIONS REGARDING NOISE IMPACTS FROM CONSTRUCTION AND OPERATION OF THE PROJECT

Submitter ID	Example Text from Submission
SE-61529254	"The project's noise levels are within NSW acceptable levels except for the landowner's home which I understand to be 2 units above the NSW level. The home of the grazier who is using land on this particular farm I understand to have a noise level equal to the NSW acceptable level."
SE-61402207	"The project is reasonably low impact and will have a maximum height of c.2 metres, no noise issues,"
SE-61426965	"they say the noise they will be making is rural, since when do cattle, trees and sheep drive metal into the landscape"
SE-61420238	"The constant loud humming sound the solar panels will emit will be an environmental hazard to local residents."
SE-61221710	"Noise through construction and after."
SE-61065957	"the approval and construction of this proposed Solar farm is taking away the enjoyment of my land by having to look at the sea of panels everyday, the noise levels during construction, (ie. the driving of every metal post for the 400+ thousand panels, the machinery involved and then the constant humming of the transformers of a day when the project is complete."
SE-60960724	"We live in the country to have a peaceful lifestyle and don't want to hear industrial noise. The noise impact from the construction is inaccurate in the EIS. We have been told that the noise will be loud during the 18 months of construction between 7am-6pm. This is horrendous. How can you expect people and animals to live like this for this long."
SE-60946472	"Lots of trucks and machines will be going past our house and we live close to the road so it will be noisy"
SE-61297707	"If I lived in the immediate area I would be worried about the possible glare from the solar panels and the visual impact, construction and operational noise and vibration impacts to my property."
SE-61252959	"The high level humming sound of the solar panels ... is a public nuisance to nearby residents"

A Noise Impact Assessment (NIA) for the Project (Appendix J of the EIS) included a quantitative assessment of noise and vibration associated with the Project during construction and operation, and appropriate mitigation measures in accordance with the Noise Policy for Industry (NPI) (NSW EPA, 2017), Interim Construction Noise Guideline (ICNG) (NSW DECC, 2009) and the Road Noise Policy (RNP) (NSW DECCW, 2011).

Worst-case noise and vibration scenarios were considered in the assessment, including low frequency noise and road traffic noise based on precautionary thresholds for human health and available traffic data respectively in accordance with the guidelines above.

The solar panels themselves do not generate noise. There is a tracker motor associated with panels which will operate in intervals over the course of a for a few seconds to adjust the orientation of the panels. This impact is negligible when considering the distance between the nearest non-associated dwellings to the panels and the infrequent noise duration of the tracker motors, for which the NIA showed compliance with NSW NPI thresholds for operational noise for all non-associated dwellings. The CNVMP will include measures to account for noise-related complaints.

Impacts to Private Residences

There were five (5) objecting submissions received relating to the impacts of the Project on neighbouring residences.

TABLE 4-30 PUBLIC SUBMISSIONS REGARDING NOISE IMPACTS TO PRIVATE RESIDENCES

Submitter ID	Example Text from Submission
SE-61539209	"We have not had anyone on our property testing for sound so how can they determine we are a low impact."
SE-61537502	"It is noted 6.5 of the EIS that there will be noise considerations during both the construction and the operation of the solar project. I consider any noise that affects the residents at R1216 either at the residence or on the property unacceptable as it may affect the residents and their staff during their work or recreation activities."
SE-61568505	"What consideration has been given to me about the 24 hours a day noise coming from the solar farm as noise concentrates around my home because of its low-lying location"
SE-61555711	"the noise impacts on neighbouring residents haven't been factored in. The information provided in the EIS seems to be a guess as no actual testing using current technologies have been conducted at our place of residence."
SE-61188304	"The noise impact will be substantial during construction and if established constant noise will be heard from my property"

The existing noise environment was evaluated in the NIA (refer Appendix J of the EIS) and the lowest possible background noise levels have been used to derive stringent noise criteria for assessment as per the NSW NPI. This remained the same in the Updated NIA (refer Appendix H of the Amendment Report).

Conservative calculation of construction noise was undertaken, applying the geometrical dispersion of noise with an assumed flat topography, no acoustic shielding and no ground absorption effects. The construction noise predictions take into consideration the sound power level of construction equipment operating continuously for a 15-minute period. The construction noise levels at any receiver depend on the type and duration of construction activity being undertaken and are expected to be highly variable over the total construction program. By assuming the source of the noise to be at the Project Area boundary, the worst-case noise levels were predicted, and appropriate mitigation measures designed to reduce the identified impact.

Operational noise from the Project has been assessed against the relevant NSW policies and mitigation measures will be in place to ensure that the impacts are within criteria that considers human well-being. 3-D noise modelling which considers topography and meteorological conditions has been used to evaluate potential noise impacts. It should be noted that no non-associated dwellings were predicted to have noise exceedances above the adopted noise criteria upon mitigation.

Infrasound

There was one (1) public submission raising concerns about the health impacts relating to noise, specifically from infrasound.

TABLE 4-31 PUBLIC SUBMISSIONS RELATING TO INFRASOUND CONCERNS

Submitter ID	Example Text from Submission
SE-61588494	"No mention of infrasound effects to humans and animals during the operation once constructed. Have you taken into consideration the noise increases when it's a very still day, or the wind blows in a certain direction."

Infrasound is sound that is below 20Hz and will be inaudible to humans. It is understood that almost all mechanically operating equipment emit infrasound, from motor vehicles and refrigerators to mobile phones and the wind itself. There are no regulatory requirements to assess infrasound in NSW regarding solar farms and related infrastructure.

A 2014 case study of infrasound noise monitoring on a solar farm in California, USA conducted quantitative measurements of its PV systems infrastructure including noise from inverters, tracker motors, cooling units and transformers. Results were presented in the infrasound-specific G-weighted sound scale (dBG) where 85 dBG is the standard threshold for perceived audibility of infrasound in Australia (Greene, 2014). Measurements showed that even at 7 m from the noise source, infrasound did not exceed this threshold. For reference, typical infrasound exposure levels for urban areas are approximately 50-65 dBG when considering near-constant direct exposure. The distance from the nearest non-associated receiver to the Project far exceeds this distance (115 m) and therefore receivers would not be expected to experience perceivable infrasound.

Wind speed and wind direction have been considered in Section 6.1 of the NIA which was prepared in line with NSW noise regulations.

4.2.5.4 VISUAL

Impacts on Visual Amenity to Private Dwellings

There were thirteen (13) submissions that raised concerns about the visual impact of the Project on non-associated private dwellings.

TABLE 4-32 PUBLIC SUBMISSIONS REGARDING VISUAL IMPACTS TO PRIVATE DWELLINGS

Submitter ID	Example Text from Submission
SE-61575995	"Highly visible - high negative impact on landscape and residences/properties"
SE-61297707	"If I lived in the immediate area I would be worried about the possible glare from the solar panels and the visual impact, construction and operational noise and vibration impacts to my property."
SE-61418223	"We have been assured as neighbours that we will have screening of the solar panels on the western boundary however the EIS does not show this. At one of the most recent Neighbour consultation meetings we have then also been advised that no screening will occur on the Western Boundary."
SE-61426965	"This project will impact on our visual amenity and will be seen from both highways. They say low impact for 25 dwellings but these people consider it a major impact especially when they try to sell."
SE-61188304	"The visual impact for neighbouring properties will cause increase stress to residents."
SE-61428462	"I live on my property not just in my home and this project will impact on my views with its ugliness spread across the landscape, it will impact on my quiet enjoyment of my property"

Moir LA undertook a revised Assessment as per the Large-Scale Solar Energy Guidelines and Technical Supplement – Landscape and Visual Impact Assessment using the Amended Project Layout. Due to changes in the Project layout, an additional three non-associated dwellings were assessed using viewshed mapping to determine if there was additional detailed assessment required. Based on topography, it was determined that these dwellings did not require a detailed assessment.

A total of ten (10) clusters were identified from which twelve (12) non-associated dwellings were selected. Fourteen additional non-associated dwellings were selected based on their proximity or their elevated position in relation to the Project Area.

As a result, a total of 26 non-associated dwellings were identified as requiring detailed visual assessments as part of the Amended Project layout. Detailed dwelling assessments were undertaken for the 26 non-associated dwellings using a wireframe assessment. A total of 25 of the 26 non-associated dwellings returned a 'low' visual impact rating, with one (1) dwelling (R123) returning a 'moderate' visual impact rating, thus triggering the need for a photomontage assessment. The revised dwelling assessments determined that there were seven (7) dwellings with a reduced cell count (i.e., reduced visual impact), did not change for seventeen (17) dwellings and increased for two (2) dwellings. The overall visual impact rating from these assessments did not change as a result of the amended layout.

A photomontage assessment, which considered the intervening existing vegetation, was conducted for the 'moderate' rated R123 which returned a 'low' visual impact rating. Existing photomontages of representative viewpoints and dwellings were also updated to reflect impacts from the revised layout, with the number of occupied cells of three (3) dwellings (R113, R27 and R123) reduced.

In summary, whilst visible to residential and public receptors the solar farm is expected to have no more than a low visual impact according to NSW assessment requirements on receptors and meets the required performance objectives under the Large-Scale Solar Energy Guidelines and Technical Supplement – Landscape and Visual Impact Assessment.

Screen Mitigation Planting

There were six (6) submissions raised regarding concerns about the screen mitigation planting. There were four (4) submissions that were raised that supported the natural or planned vegetation screening for the Project.

TABLE 4-33 PUBLIC SUBMISSIONS REGARDING VISUAL SCREEN MITIGATION PLANTING

Submitter ID	Example Text from Submission
SE-61529254	"I cannot see any problem with visual impacts of the project from the Oxley Highway and it seemed to me that the landowner who could see a little of the project from his/her property would be able to block the view by planting a tree next to his/her existing trees as seen in the photo provided."
SE-61488965	"I think the solar project is well sited in regards to the village of Bendemeer, and with multi row tree plantings to screen "over looking" of the site by other landholders it should be relatively unseen by most."
SE-61489067	"The Solar farm is only on one property and the design of the project has little visual impact on the village ...There is already significant native vegetation that provides visual shielding of the panels."
SE-61418223	"At one of the most recent Neighbour consultation meetings we have then also been advised that no screening will occur on the Western Boundary"
SE-61539209	"Athena advised they would be planting trees along the entire length of the solar farm so we would not see a solar panels. They called this screening. They advised they would need to maintain this fence line and keep all of the tress alive. Some of the tress would be 100m tall bit still not be able to cover, hide and even screen the solar panels. Athena even advised they would be planting established trees to ensure screening would be acceptable. Athena have now reneged on this and advised us, we are low impact, and as a result, they don't have to do anything."

The assessment tools implemented as per the Large-Scale Solar Energy Guideline and Technical Supplement require all dwellings and public viewpoints with a preliminary moderate to high visual impact rating, to prioritise mitigation strategies in accordance with the performance objectives. There were no dwellings or public viewing locations which rated as moderate or above during the detailed dwelling and public viewpoint assessment process in the EIS or revised amended Project assessment, resulting in no requirement for mitigation screen planting provision.

However, it is noted that the Applicant proposes screen vegetation to the sections of the southwestern and north boundaries reducing the potential for views toward the Project from the south and north based on the recommendations presented in the Addendum LVIA.

This method of mitigation was highlighted as a positive aspect of the Project within the public support submissions.

It is also noted that the amended layout includes a reduction in panels from the western extents, retaining the existing dense vegetation which forms an effective buffer to views from the west.

Broader Landscape Concerns

There were thirty-six (36) submissions raised regarding concerns for the broader landscape changes. Six (6) submissions were raised that perceived there to be limited impact to the broader landscape.

TABLE 4-34 SUBMISSIONS REGARDING BROADER LANDSCAPE CONCERNS

Submitter ID	Example Text from Submission
SE-61489067	"There is already significant native vegetation that provides visual shielding of the panels."
SE-61538457	"Frankly the hub will not be an awful scar on the land like the coal mines are."
SE-61489067	"The Solar farm is only on one property and the design of the project has little visual impact on the village"
SE-61468473	"Having seen the location of this solar farm I consider it to be aesthetically pleasing."
SE-60625993	"an eye sore from their properties"
SE-61584976	"This solar farm proposal takes away from the local community, it takes away the picturesque nature of Bendemeer and lowers it to being just another forgotten town on the map."
SE-61529238	"The solar farm is unsightly"
SE-60960724	"Bendemeer is known for its beauty. This site will be visible from the entire Bendemeer community"
SE-60806819	"I have beautiful views and this project will be an eye sore ."
SE-60910961	"Negative aesthetic on outlook of country landscape"
SE-61428462	"I live on my property not just in my home and this project will impact on my views with its ugliness spread across the landscape"
SE-61091464	"I have seen these panel farms, they are hideous monstrosities that are undeserving of a place anywhere, let alone what is a lovely mountainous area the likes of Bendemeer."

The public submissions indicated that there was some support of the Project within the broader landscape, with the existing screening and singular location of the Project reducing wider landscape impacts. The EIS included a detailed landscape character assessment which involved the categorisation of six (6) Landscape Character Zones, rated from low to moderate in accordance with the assessment tools outlined in the Technical Supplement (refer Section 6.62 of the EIS).

An assessment of the potential impacts to the nominated Landscape Character Zones was conducted in accordance with the 'Frame of Reference for Scenic Quality Values' matrix. The 'Frame of Reference for Scenic Quality Values' matrix provides an unbiased and widely accepted classification criteria that considers key landscape features known to be associated with community perceptions of low, moderate or high scenic quality.

These features include Landform, Vegetation, Waterbodies, Social/Cultural and Human Presence and are scaled appropriately as per the matrix.

It is acknowledged that the community values views of the country landscape including the agricultural land. It has been determined through the detailed landscape character assessment that the key features that form character of surrounding landscape will remain intact as a result of the Project. This is due to the low visibility of the Project from the surrounding area due to the existing topography and existing vegetation.

Lighting

There were three (3) submissions raised regarding concerns to lighting.

TABLE 4-35 PUBLIC SUBMISSIONS REGARDING LIGHTING CONCERNS

Submitter ID	Example Text from Submission
SE-61575995	"Lowe Observatory located in Bendemeer for its dark sky - project lighting will impact this"
SE-61426965	"The night lighting of this area will also impact in this village. There is a very large moth that hatches each summer here and these night lighting of this site will impact on their life span and breeding."

The requirements for lighting of ancillary infrastructure for this Project is limited to security lighting to the substation, and within the operations & maintenance facility. The light sources are limited to low-level lighting for security, nighttime maintenance and emergency purposes. There will be no permanently illuminated lighting installed. The proposed ancillary infrastructure has been carefully sited to minimise visibility from existing residences and publicly accessible viewpoints.

Due to the rural location of the Project, very little existing sources of lighting are present in the nighttime landscape of the Study Area which includes existing lighting associated with the village of Bendemeer, homesteads and motor vehicles dispersed around the Study Area.

Due to the topography and Project siting there are likely to be limited views of the proposed lighting from the village of Bendemeer. The impact of night lighting is unlikely to be experienced from inside of a dwelling as internal lights reflect on windows and limit views to the exterior at night. It is unlikely the proposed night lighting associated with the ancillary infrastructure would create a noticeable impact on the existing nighttime landscape, particularly from the village of Bendemeer.

It is anticipated that implementation of lighting in accordance with design principles noted within Section 10 of the Addendum (refer Appendix I of the Amendment Report) will reduce the instances of potential light pollution for both Bendemeer Village and the Lowe Observatory.

Any impacts associated with the impacts of the Project on the fauna are addressed within the Updated BDAR (refer Appendix E of the Amendment Report).

Glint and Glare

There were twelve (12) submissions that raised concerns regarding the glint and glare of the Project. There was one (1) submission received that perceived there to be limited impact from glint and glare.

TABLE 4-36 PUBLIC SUBMISSIONS REGARDING GLINT AND GLARE

Submitter ID	Example Text from Submission
SE-61402207	"The Bendemeer solar farm is cited close to large capacity transmission assets that allow the connection of renewable energy generators. The project is reasonably low impact and will have a maximum height of c.2 metres...and Limited glint and glare."
SE-61487995	"Having seen the Solar farm between Uralla and Armidale the black glare is very off putting and distracting when travelling along the highway and you wish to in flick that on Bendemeer"
SE-61169004	"It will be an eye sore for travellers and what the glare off the panels will this cause accidents"
SE-61160970, SE-61161015, SE-60991709, SE-61093977	"The visual effects are huge with the solar farm being right on the Oxley Highway it will cause glare to drivers and residents that live near by"
SE-60943960	"I have seen my family really upset about all the solar panels they want to put up right near our house. It will be bright in our eyes and we wont be able to see when playing football in our yard or when riding our horses on our farm."
SE-61587231	"Solar panels can reflect sunlight, creating glare that might impact nearby residents, drivers, or even nearby air traffic, if applicable. This glare could potentially be seen as a safety hazard."
SE-61188304	The visual impact from the road will cause danger for motorists...The glare will impact the local residents and their farm usage with not being able to use it to its full potential due to glare. ""
SE-61439218	"The disruption of visibility through glare and shadow potentially disrupts the lives of people but especially also that of species dependent on the signals within nature for their lifecycles."
SE-61587241	"This Contaminating Visual Amenity Nightmare of glaring panels would unjustly subject rural people to an ugly, irritating eyesore - totally contrary to the pretty rural landscape"

A revised glint and glare assessment was undertaken using the Amended Project Layout and completed in accordance with the Large-Scale Solar Energy Guidelines - Landscape and Visual Technical Supplement and Guidelines. The Guidelines requires all residential receptors within 3 km, and all road and rail receptors within 1 km of the Project be assessed for the potential for 'yellow' glare.

The Large-Scale Solar Energy Guidelines state that the implementation of mitigation measures is required for residential receptors to reduce impacts as far as practicable for dwellings experiencing over 10 hrs per year of glare. The assessment found that of the 39 dwellings identified within the 3 km, one dwelling (R60) was identified as having glare impacts which triggered mitigation.

The Large-Scale Solar Energy Guidelines state for road and rail receptors that if glare is geometrically possible then measures should be taken to eliminate the occurrence of glare.

The EIS had assessed the glint and glare for the Project based on three potential scenarios and found that under the committed scenario, zero glare would be experienced by receivers. This committed scenario was based on a normal tracking with backtracking pattern with a nighttime stowing angle of 5°.

A revised glint and glare assessment was conducted for the amended Project layout as well as the lowered height of the PV panels. This generally decreased the unmitigated scenario glare impact and subsequently reduced the mitigating scenarios to two (Scenario 1 and Scenario 2). Metis are committed to undertaking the mitigating scenario to manage the panels in accordance with Scenario 2 as per the Addendum LVIA (Appendix I of the Amendment Report):

*Normal tracking with backtracking and movement to the manufacturer's recommended night-time stowing position during dark hours (no earlier than one hour after sunset).
Movement from the night-time stowing position to the sunrise tracker position of 60° shall occur during dark hours (no later than one hour prior to sunrise).*

Scenic Quality

TABLE 4-37 SUBMISSIONS RELATING TO SCENIC QUALITY CONCERNS

One (1) submission raised concerns regarding the impact to landscape characteristics.

Submitter ID	Example Text from Submission
SE-61429209	"The Scenic Quality Rating of the LCZ has been described as low to moderate. The Bendemeer scenic quality as appreciated by those who live here or are advertising the area to sell a property or for tourism would emphatically disagree with that rating. The "expert" assessment is not correct regardless of the basis behind it and should not be accepted as fact by the NSW Planning Department/Planning Minister as it is not."
	This project area cannot be constructed with minimal impact on the existing landscape character or upon its defining features. 430,000 black solar panels and associated industrial infrastructure spread over a massive 1498.447 acres (606.4 hectares), sited almost at the boundary of the village will have a huge impact on the existing landscape character and this project will not be described as beautiful.
	"The impact of this massive solar project on the Bendemeer landscape and therefore the views enjoyed by Bendemeer's inhabitants cannot possibly be understood by a landscape architecture firm that could not place the same value on this area in the first instance as presumably they do not reside here, presumably have not invested time and money into a property here and appear to have little if any experience in determining a view's value in an area such as Bendemeer. Every project listed as recent experience by Moir is flat, cleared land, which also makes it crystal clear that the Bendemeer range area is not a suitable placement for a solar project."

Section 6.6 and Appendix K of the EIS included a detailed landscape character assessment which involved the categorisation of six (6) Landscape Character Zones, rated from low to moderate in accordance with the assessment tools outlined in the Technical Supplement.

An assessment of the potential impacts to the nominated Landscape Character Zones was conducted in accordance with the 'Frame of Reference for Scenic Quality Values' matrix. The 'Frame of Reference for Scenic Quality Values' matrix provides an unbiased and widely accepted classification criteria that considers key landscape features known to be associated with community perceptions of low, moderate or high scenic quality. These features include Landform, Vegetation, Waterbodies, Social/Cultural and Human Presence and are scaled appropriately as per the matrix.

It is acknowledged that the community values views of the country landscape including the agricultural land. It has been determined through the detailed landscape character assessment that the key features that form character of surrounding landscape will remain intact as a result of the Project. This is due to the low visibility of the Project from the surrounding area due to the existing topography and existing vegetation.

Adequacy of Assessment

There were seven (7) submissions relating to the adequacy of assessment and the assessment approach that was undertaken.

TABLE 4-38 SUBMISSIONS RELATING TO CONCERNS ABOUT ASSESSMENT ADEQUACY

Submitter ID	Example Text from Submission
SE-61065957	"I also strongly believe that the visual impact studies taken do not at all reflect on the actual impacts. As they're only taken from one location on the property. As you move about the property you will clearly see a lot more of the pv array."
SE-61429209	"We do not agree that the impact on the 26 receptors is low. If the Bendemeer community believe wholeheartedly that their landscape, their environment in and around Bendemeer is beautiful, enjoy the entirety of their rural properties with views in all directions including those who reside on residential properties who derive endless enjoyment in sitting on their verandah and looking East as most homes face in Bendemeer, it is not possible that the visual impact will be low."
SE-61555711	"The visual assessment is only conducted from the residence and also this is problematic as it incorporates the few existing trees we have on our property, which when taking a photo blocks out several squares on the visual impact photo but move a few centimetres either way and it is a completely different view."
SE-61539209	"We were advised the Athena team at the beginning they would be taking photos everywhere and all over our property to confirm our visual impact. We later discovered the Athena obligations are only from the main residence. When we question this and advised our property doesn't just include our house but also the 174 acers and which spans over 1.3km in length which results in a hell of a lot more visual impact then just the 1x photo they took from my home. Athena advised this is the NSW guidelines and that's all they need to take to comply."
SE-61102748	"The visual impact photos taken were not taken from all parties affected by the project ."
SE-61537502	"While it is noted that the visual impact from the residence at R1216 is low, the impact from further up the paddock where day to day work is carried out it would be very high. If another residence or building were to be built further our the hill, it would be severely visually impacted."

Submitter ID	Example Text from Submission
SE-61588494	"Western neighbour to the north solar array has not been included in the visual...assessment. Although this property does not have a residential dwelling on it, it has sheds and is approved for a residential dwelling. Therefore the owners are likely wanting to put a dwelling on this property and being impacted by solar farm via visual...would significantly impact the value of this property and potential to build a dwelling on it. There is not even any vegetation planting planned for this western and south western boundaries which seems very unfair and counteractive of the vegetation screening mitigation measures detailed in the EIS to reduce impact of property devaluation."

Under the Large-Scale Solar Energy Guidelines and Technical Supplement – Landscape and Visual Impact Assessment, assessment is required for dwellings due to their level of sensitivity. Land utilised for farming activities have a lower visual sensitivity. The Viewpoint Sensitivity Level Table from the Large-Scale Solar Energy Guidelines and Technical Supplement – Landscape and Visual Impact Assessment rates primary views from dwellings in rural areas as moderate. A primary view is defined as a principal/frequented living space (e.g. living rooms, kitchens, dining areas).

A view from a paddock would be categorised as a secondary view and is defined as a less frequented service area. Secondary views have a low viewpoint sensitivity level.

Additional photomontages have been prepared from R27 and R112. These photomontages have been updated to reflect the amended Project layout. The requirement for the preparation of photomontages is determined through the assessment tools outlined in the Guidelines and Technical Supplement which was applied to the Amended Project Layout. A total of one (1) private dwelling returned a 'moderate' visual impact rating. Two (2) public viewpoints were identified as requiring the preparation of a photomontage to determine the visual impact rating with consideration to the existing screen factors such as vegetation and structures.

Although only one (1) private dwelling photomontage was deemed necessary as per the Guidelines and Technical Supplement assessment criteria, three (3) additional photomontages were prepared from private dwellings at the request of the Proponent to compare any changes from the original LVIA. These were prepared from R1216, R113, R27 which all returned the same 'low' visual impact rating.

Following the development of the Bendemeer Solar Farm Addendum (refer Appendix I of the Amendment Report), a total of two (2) additional photomontages and (1) wireframe was prepared to demonstrate the potential visual impacts from R112 and an alternative location of R27. The outcomes of this detailed assessment returned a 'low' visual impact rating for R112 and R27.

Photomontage locations are selected from the dwelling due to their level of sensitivity. The Technical Supplement states '*Viewpoint sensitivity relates to the relative importance of viewpoints and the value that the community or visitors may place on landscapes viewed from public use areas, public travel ways and private receivers such as dwellings... Primary views are considered more sensitive than secondary views*'.

Note that potential devaluation concerns are discussed in **Section 4.2.5.12**.

Future Development

There were two (2) submissions raised regarding concerns about future development.

TABLE 4-39 SUBMISSIONS RELATING TO FUTURE DEVELOPMENT

Submitter ID	Example Text from Submission
SE-61065957	"My residential land has 3 separate titles, and the approval of this project will be blocking me from subdividing my land in the future for the growth of the town."
SE-61588494	"Western neighbour to the north solar array has not been included in the visual and noise assessments. Although this property does not have a residential dwelling on it, it has sheds and is approved for a residential dwelling. Therefore the owners are likely wanting to put a dwelling on this property and being impacted by solar farm via visual and noise would significantly impact the value of this property and potential to build a dwelling on it."

Potential future dwellings are not required to be considered under the Technical Supplement - Landscape and Visual Impact Assessment. The development of the solar farm will not prevent subdivision in accordance with the Tamworth Regional LEP. The Addendum LVIA has further assessed potential visual impacts relevant to the amended design.

Significantly, the areas of the north solar arrays have been reduced, providing more separation between the solar arrays and the property boundary. The amended Project has provided additional visual impact reduction; however, it is important to note that visual impacts for the project presented in the EIS were assessed as low. While not required, photomontages have been prepared for the property immediately to the west of the northern solar array.

Cumulative Impact

There were two (2) submissions relating the visual cumulative impact of renewable developments in proximity to the Project.

TABLE 4-40 SUBMISSIONS RELATING TO THE CUMULATIVE VISUAL IMPACT OF THE DEVELOPMENT

Submitter ID	Example Text from Submission
SE-61575707	"In our opinion the appearance of these industrial size solar arrays or wind towers together with the accompanying transmission towers and lines in our scenic rural environment is totally offensive and completely destroys the existing scenic beauty and amenity"
SE-61429209	"There is an unquestionable cumulative impact for Bendemeer as this project will be highly visible from many locations especially Bendemeer village itself and some severely impacted landholders who reside with their families beside this proposed major industrial development. Bendemeer is impacted severely by the Thunderbolt wind project to the north, Bendemeer wind project north, south and east of the village and current location maps showing the expected 250m high turbines (Crown Sydney Barangaroo 271m) within 4-5kms of Bendemeer, closer to many family farms some of 7 generations."

Additional Cumulative Impact Assessment has been undertaken, which considers the proposed Bendemeer Wind Farm which adjoins the Project to the west, and Thunderbolt Wind Farm, which is located approximately 16 km north of the Project. The assessment that was conducted by Moir concluded that due to the horizontal scale of the Project, combined with undulating topography and intervening vegetation, it is unlikely that Thunderbolt Wind Farm will be visible in combination with the Project.

Due to the existing topography and low horizontal scale of the Project, opportunities for cumulative impacts from along the Oxley Highway and New England Highway are low. Bendemeer Station Road is considered a low-use road located to the south of the Project. Opportunities to view the Bendemeer Wind Farm concurrently with the Project is limited due to existing vegetation and topography.

4.2.5.5 SOILS AND AGRICULTURE

Loss of Agricultural Land

There were thirty-two (32) submission raised that considered the loss of agricultural land as a result of the Project. There were nine (9) submissions that supported the ongoing use of the Project Area for sheep grazing following construction.

TABLE 4-41 SUBMISSIONS RELATING TO LOSS OF AGRICULTURAL LAND

Submitter ID	Example Text from Submission
SE-61489067	"The Solar farm is only on one property and the design of the project has little visual impact on the village and as well the design layout allows for the grazing of sheep which does not according to CSIRO and other research in Australia reduce the carrying capacity of the land and can be returned to its original state at end of life unlike coal and gas projects."
SE-61390713	"The agricultural land at Bendemeer is medium quality grazing land and a solar farm will have minimal impact on the agricultural output of the specific project area or the region as a whole."
SE-61342965	"On the soil type, the land itself is quite dry and dusty and while good for pasture, it is not as suited to other forms of agriculture such as cropping. Given the nature of a solar farm, the land will still be suitable for the grazing of livestock such as sheep and so the land becomes multipurpose, where we can still maintain our existing industry, while also decarbonising our energy sources."
SE-61236712	"I also think that it is fantastic that the agricultural land will not be lost under the solar panels, and that sheep are planned to graze underneath them going forward"
SE-61419483	"Prime Agricultural Land needs to be preserved for future generations. To be able to live here at all we need grow a State Significant Amount of Food."
SE-61584976	"Families in the region particularly Bendemeer rely on the land for produce, livestock and many other necessities or livelihoods."
SE-61454959	"I am against the solar industrial development on agricultural land."
SE-61426965	"Report found low fertile soil-then how will construction take \$249,000 out of agricultural economy -not so bad soil after all."
SE-61188501	"The solar farm is being built on good grazing land that will be ruined forever"
SE-61584957	"Uses up valuable agricultural land currently used to produce food and fibre,"

Submitter ID	Example Text from Submission
SE-61227708	"Power should be generated where it is to be used. Undertaking renewable projects on agricultural land is ... threatening Australia's food and fibre production"
SE-61587231	"If agricultural land is converted into a solar farm, it could result in a decrease in local food production. This might be a concern for those who value food security and locally-sourced produce."
SE-61606458	"*Caring for our healthy soil & water supplies responsibly is essential for our lives. Good agricultural, pastoral land should not be covered in solar panels for decades to come, as this land is limited & must be prioritised for growing life sustaining food supplies."
SE-61167957	"I object to the disgraceful proposition to build a solar factory on grazing land in a high rainfall area."
SE-61587241	"Loss of Ag Land Threatens Food Security"
SE-61297707	"I am concerned about the solar panels being located on highly productive agricultural land."
SE-61486221	"This project is unsuitable for the New England Area. It is predominantly high quality agricultural land capable of producing premium livestock, crops, forage, horticulture and viticulture. It is also proven to be a prime region for revegetation and re-establishment of its recyclable tree and grass environment."
SE-61557958	"My primary objection for this project, is that fundamentally I believe the New England area is well known and perfectly positioned as a prime agricultural region – and that it must be used for this purpose and this purpose alone – large scale solar (and Wind) do not have a place in New England – nor Bendemeer"
SE-61587711	"We are not growing any more agricultural land, the population is expanding, how are we to continue to produce our food and sustain our natural products when productive land is being covered in solar panels."

The Applicant has committed to implementing effective agrisolar practices during the operation of the Project, which received support from the public community. This is supported by evidence of agrisolar success both internationally and within Australia, as presented in the Australian Guide to Agrisolar for Large-Scale Solar Farms (Clean Energy Council, 2021). In 2020, there were at least 13 large-scale solar farms grazing sheep in Australia. The research carried out indicates that the experience of farmers involved in grazing sheep within solar farms in Australia has been overwhelmingly positive. Factors that contribute to the success of agrisolar include the following:

- Increased health and wellbeing of sheep due to protection from the elements;
- Less water consumption by sheep;
- Safety from predators for livestock due to secure fencing;
- Access to greener pasture, particularly during dry conditions or drought, leading to reduced operating costs; and
- High wool quality, according to a preliminary analysis.

This solar array type chosen for the Project allows retention of existing grassland vegetation in situ with minimal ground disturbance and 6 m spacing of rows to facilitate agrisolar and minimise soil impacts. The impacts on agricultural resources, such as soil and water, as a result of the Project are determined to be minimal, temporary, and limited to the Project Area. Up to 18.5 ha may be removed for the duration of the Project, which is considered negligible in terms of land and soil capability and area of land used for agriculture in the Tamworth Regional LGA and broader state.

As per the Updated SAIA (refer Appendix J of the Amendment Report), the impacts on agriculture as a result of the Project are determined to be minimal, temporary, and limited to the Project Area. There will be no impacts to agricultural resources or enterprises outside the Project Area. The minor reduction in agricultural productivity as a result of the Project, in context of the scale of agricultural industries and services operating in the region, would not impact families or livelihoods in the region.

'Prime Agricultural Land' is terminology linked to an outdated land classification scheme. The Project Area does not contain LSC class 1 – 3 lands, as per the LSC verification assessment undertaken in accordance with the Large-Scale Solar Energy Guidelines and presented in the Updated SAIA. The Project Area does not contain Biophysical Strategic Agricultural Land (BSAL), or State Significant Agricultural Land – lands considered the most important for agriculture in NSW. Livestock grazing is generally suitable for LSC classes 4 – 6 verified for the Project Area where 68% of the Project Area is shown to comprise of LSC class 6 'low capability land'.

Livestock grazing will continue throughout operation of the Project, where the Updated SAIA concluded that no permanent impacts on LSC classes within the Project Area are expected upon decommissioning.

Despite the status of the site not being prime agricultural land or BSAL, the DPI has indicated that the cumulative risk to agricultural land and productivity because of large-scale solar development is very low. AEMO estimates that NSW will need approximately 20,000 MW of large-scale solar generation by 2050. This would require approximately 40,000 ha of land or only 0.06% of rural land in NSW. Even in the highly unlikely scenario that all of NSW's solar generation were located on important agricultural land (this land covers around 13.8% of the state and is 6 to 7 times more agriculturally productive than the remaining 86.2% of the state) only 0.4% of this land would be required (DPE, 2022a).

Agricultural Productivity

There were fourteen (14) submissions that were raised regarding potential concerns to loss of agricultural productivity. There were seven (7) submissions raised in support of the Project increasing agricultural productivity following construction.

TABLE 4-42 SUBMISSIONS RELATING TO REDUCTION OF AGRICULTURAL PRODUCTIVITY

Submitter ID	Example Text from Submission
SE-61584479	"It was also pleasing to see that the Project provides for the continuation of use for agricultural productivity, ensuring the ongoing agricultural prosperity of the region."

Submitter ID	Example Text from Submission
SE-61538457	"The owner of the farm is obviously happy to have the hub on his land and it will ensure a regular income for him during the drought times. He can graze his sheep beneath the panel and they will benefit from the shade in summer."
SE-61009460	"It is the best assistance for the struggling local agriculture industry"
SE-61326724	"From an economic aspect this development will provide landowners with compensation that will act as a passive income stream. This is particularly useful in agricultural businesses that are being impacted by two independent economic issues."
SE-61491710	"The Solar project will allow grazing of sheep to continue under the panel once constructed with no reduction in productivity if not proven to be an increase and the solar panels can be removed at the end of time allowing the land to be returned to the original state in a short time not like a mine or gas project."
SE-61438482	"Shifting the dynamics of rainfall on the landscape, along with shade and shadow diminishes the prospect of effectively grazing within the project area."
SE-61428462	"The land will not be farmed as could be without the solar panels up to 4.2m high shading the land where temperatures fall to negative 13 degrees with negative 11 only a few weeks ago, ground cover does not grow on south side of house during winter."
SE-61236264	"It will negatively affect my future farming land in terms of productivity and land value. My farming land uses the same river that will be connected to the Bendemeer solar farm as it is predicted to add pollutants to this river system in terms of contaminants which will negatively affect my livestock value"
SE-61564215	"Set against the electricity production of the Bendemeer Solar Farm, the lost economic agricultural production, may be more than the economic electricity production of the Bendemeer Solar Farm while it is in production. Once the productive life of the Bendemeer Solar Farm has ceased in fifteen- or twenty-years' time, then the lost financial benefit from lost agricultural production will continue to have a very significant effect on the surrounding towns and cities of Tamworth and Armidale for a very long time."
SE-61447210	"I have worked in the agricultural sector for over 40 years, following a 25 year stint as a specialist research officer with NSW Soil Conservation Service and CSIRO Canberra, then a broad ranging consultant in the farming industry throughout Australia. I object to this and similar projects as they put pressure on a limited soils resource and interrupt the broader farming system by: 1. Sterilising land areas; 2. Interrupt the landscape and farming systems;"
SE-61429209	"We disagree that the project will have a minor and insignificant contraction of agricultural activity as it will cease almost altogether given the monies received by the landholder for such a project – apart from weed eating sheep, what incentive is there for farming to continue in order to make a living?"

Inherent soil fertility as presented in the Updated SAIA (refer Appendix J of the Amendment Report) is regional mapping provided by the NSW government. A detailed assessment of the soil within the Project Area found that soils ranged from low fertility to moderate capability. The agricultural productivity presented in the Updated SAIA is based on Department of Primary Industries Gross Margin Budgets and is conservative based on the verified land capability. The estimated productivity of up to \$250,067 is expected to be higher than the true agricultural productivity value lost during construction; however, is suitable as a conservative estimate for the purposes of the Updated SAIA.

A description of mitigation measures and management recommendations have been provided in Soils and Agriculture Impact Assessment to eliminate the permanent and control the temporary risks of the Project on land and soil resources. The salvage of topsoil material for re-use purposes to stripping depths detailed in this report, combined with sound erosion and sedimentation management practices during construction, operational and decommissioning phases of the Project, will ensure rehabilitation requirements are met and land is returned to a pre-disturbance agricultural status.

Risks of the Project generating contaminants is discussed in **Section 4.2.5.6**.

As detailed in Section 6.13 EIS, a Waste Management Plan (WMP) will be prepared prior to construction. The WMP will detail appropriate measures to be incorporated to avoid potential contamination to land and water. In addition, erosion and sedimentation controls, as outlined in Soils and Agriculture Impact Assessment and the Conceptual Soil and Water Management Plan (refer Appendix N of the EIS), will be implemented to target erosion hazards to reduce impacts to local waterways.

As detailed in Section 6.7 of the EIS, the economic benefits of the Project far outweigh the agricultural economic impact. As per the Updated SAIA, the impact on agriculture productivity as a result of the Project is determined to be negligible in context of the value of agriculture to the Tamworth Regional LGA. It is anticipated that by adopting the principles of impact avoidance and minimisation during Project construction and operation and implementing effective decommissioning and rehabilitation at the end of Project life, the Project will have no permanent negative impacts on agricultural productivity.

The footprint of the Project that impacts agriculture in the region is a very small fraction of agricultural land in the region and hence overall contraction of agricultural activity in the region will be minor. The parts of the subject land not required for the Solar Farm will continue to be used for agriculture. The incentive to do so is the income that can be earned. If the land were not farmed there would be significant costs to the landowner associated with weed, fire and pest control.

Biosecurity

There were two (2) submissions raising concerns about biosecurity risks from the Project. There was one (1) submission that noted benefits to biosecurity management from the Project.

TABLE 4-43 SUBMISSIONS RAISED REGARDING CONCERNS FOR BIOSECURITY

Submitter ID	Example Text from Submission
SE-61342965	"The project has also undergone thorough studies which indicate that they will be improving the state of the land that the Solar Farm will be going on, particularly with the weed management."
SE-60960724	"The property proposed has extensive rabbit population. Once bulldozing starts the rabbits will move to neighbouring properties causing more issues for neighbours. Due to the natural water course a rabbit proof fence will be impossible."
SE-61188304	"The current site contains many pests that haven't been managed and these pests will be pushed onto my property causing additional work and stress on me to managed."

Weed, pest (biosecurity) and groundcover management will be integrated with the Grazing Management Plan as a Pest and Weed Management Plan (refer **Table 4-1**). The Grazing

Management Plan will be included as a condition of consent should the application be approved and developed in consultation with NSW Local Land Services.

4.2.5.6 WATER RESOURCES AND HYDROLOGY

Town Water Supply

Thirty-one (31) submissions that were raised that expressed concerns towards the impacts of the Project to the town water supply, regarding the use of available water and potential contamination. There were three (3) submissions that noted the positive impact of the water run-off upstream to the town water supply.

TABLE 4-44 SUBMISSIONS RELATING TO TOWN WATER SUPPLY IMPACTS

Submitter ID	Example Text from Submission
SE-61529254	"This grazier will have the benefit of extra water on the grass under the solar panels because of the runoff from condensation. An extra source of water is of immeasurable benefit in our increasingly arid climate."
SE-61491959	"have fewer effects on the environment than many other energy sources. It will not release emissions that can pollute the air or water and will not require water for cooling"
SE-61040465	"The solar farm's presence on a broader scale will also mitigate air and water pollution, ensuring cleaner air and water for our current and future communities."
SE-61588494	"Water usage utilising existing water licences along the Macdonald river which is currently in poor health and has had significant fluctuations in water levels and flows within the last 5 years, let alone a 25 year period. The river was dry in long stretches for over a 6month period during the 2018-2020 drought. This river system is not capable of supplying regular significant water sources to industrial developments and it is concerning to think no assessment of river health or water flow has been undertaken within this EIS. What is the impact of removing this water from the river?"
SE-61539209	"Athena advised there will be zero impact to our water supply, our livestock's water supply or that of the township of Bendemeer all located down stream of their proposed solar site. Athena also advised the solar panels are cleaned daily with soapy water. How is it not possible that there is zero impact from this. Obviously, another guess or lie. All of the water they plan to use daily is coming from the McDonald River under a local residences water licence. Another secret no one is meant to know."
SE-61522710	"It is being on the town water supply which will sooner or later be contaminated by the solar farm"
SE-61488279	I'm writing to put in an objection to your proposed Solar Farm ... which the MacDonald River runs through. This is also our source of drinking water "
SE-61482457	"The project is situated beside the Macdonald River and sits over a catchment area for this river which is our town drinking water supply."
SE-61420238	"The proposed solar farm will be located too close to a main river which is also the towns' main drinking supply, potentially"
SE-61221710	"Concerns of water quality in river with run off. Concern for town with water in drought times"
SE-61208213	"Coming into drought, we have only just recovered from the last major drought. Where will you then source water not only for the panels but for the rest of the town?"

Submitter ID	Example Text from Submission
SE-61160970, SE-60991709, SE-61093977	"The solar farm is being built right beside our town water supply and may seep into the town water if the panels are broken by a hail storm or damaged in any way"
SE-61169004	"It's running along the McDonald River which is the main water source. Concerned about chemicals leaking into the river system. We are also coming to face another drought. Where will all the water come from to clean the panels. What will Bendemeer residents, local farmers and all their animals drink when all the water has been pumped out? Will it be safe to swim in?"
SE-61161015, SE-61093977	"Our soil in bendemeer is granite which filters water and doesnt hold the water that the solar farm say they can hold in seepage dams it will seep right through into the McDonald River in the town water supply"
SE-61074459	"What is the impact on our small river, the town water supply... pollution to the river destroys our water source completely."
SE-60988961	"I object to the project as it is very close to the village of Bendemeer and the McDonald River. The river is the lifeblood of town"
SE-61587241	"a Public Health & Safety Risk for our life sustaining Food supply & vital water sources - including the Macdonald River to the south & the series of dams & 1st & 2nd order ephemeral creeks across the site."
SE-61252959	"The location is near the main drinking supply of water for Bendemeer and risks contamination."

Solar arrays do not typically pose a direct threat to water quality. Solar panels are made up of several components, including a silicon-based semiconductor material, aluminium, glass, connectors and electrical wiring. The substances within the PV cells cannot easily dissolve into water. Power transformers featuring oil insulation or inverters and BESS units featuring liquid coolant-based designs may leak if not correctly maintained or installed. As described in Appendix A of the Amendment Report, there will be environmental controls for oil and coolant bunding will be in place, through internal tray based bunding or dedicated bunding structures. The Applicant is committed to developing an operational environmental management plan (OEMP) which will include regular inspections and maintenance of the solar arrays and the associated systems.

Further, the Project description has been amended to provide for the use and storage of water required for Project construction and operations, which may include for solar panels cleaning (refer Appendix A of the Amendment Report). As per the Memorandum of Understanding (MOU) for WAL 32496 with the landowner, water will be extracted from the existing Mid Macdonald River Water Source and stored onsite during construction as needed. The O&M Facility will include a septic system. Two static water supply tanks each with a capacity of 100 kL will also be provided adjacent to the O&M facility and internal roads during construction and operation for maintenance, firefighting/bushfire management.

Several concerns were raised about the potential impact on the towns water supply as a result of water demands for the Project. The Applicant has a MOU with the landowner for use of the volume of entitlement for WAL 32495. The volume of entitlement held is 60 ML/year and is adequate to meet the Project demands during construction and operations. Construction would occur across 18 months (i.e. two WAL years) where there is 120 ML available for an estimated 110 ML total to be used. This commercial arrangement with a host or neighbouring landholder is consistent with other construction projects in NSW. Formal agreement for the WAL will be subject to commercial terms following the engagement of the EPC contractor.

The preferred water supply option during construction is to extract from the Mid Macdonald River Water Source via WAL 32495 where an existing water supply work approval for a pump can be utilised for any water take infrastructure required for the Project. The highest water demand during construction is likely to be for dust suppression. Mitigation and management measures will be adopted to avoid impact on local water resources and users (refer DCCEE W – 01 in **Table 4-3** and Appendix A of the Amendment Report)). Any additional water supply work approvals for required will be sought from WaterNSW.

As outlined in Section 6.8 of the EIS, the project development will have minimal impact on the depth and velocity of stormwater runoff. It is anticipated that approximately 100 mm of grass cover is to be maintained around and underneath the solar arrays, which will reduce the likelihood of erosion from any concentrated flow from PV panels. As outlined in the conceptual soil and water management plan, presented in Appendix M of the EIS, during construction of the project, stormwater and runoff will be managed using best management practices for erosion and sediment control.

The Applicant has committed to development of construction phase management plans with details on the specific location, type, and sizing of erosion and sediment control measures implemented. These plans will be prepared in consultation with the selected construction contractor and will be provided at the detailed design phase of the project.

During operation, non-potable water requirements for the solar farm will be minimal in addition to the agricultural water demand currently at the site and sourcing via the WAL will not exceed 2 ML per year. Potable water supply for the on-site personnel will be imported and stored within the Project Area. Wastewater generated from the site will be sent to Tamworth wastewater facilities for treatment and disposal.

Soil Erodibility

Nineteen (19) submissions that raised concerns about soil erodibility. There was one (1) submission that commended the planning measures outlined to reduce erosion impacts during the Project development.

TABLE 4-45 SUBMISSIONS REGARDING SOIL ERODIBILITY

Submitter ID	Example Text from Submission
SE-61160977	"The solar project is highly regulated in its construction and the EIS outlines very clearly and in detail about the mitigation of sedimentation. I am confident that the Department of Planning and Environment will strictly control adherence to any of the identified, or potential, risks in the development of this project."
SE-61438482	"The soils in Bendemeer area are particularly difficult to manage with regards to wash, erosion, porosity, water logging and stability"

Submitter ID	Example Text from Submission
SE-61568505	"There is ongoing gully erosion where the solar farm is to be situated causing 1000's of tonnes of sand to wash into Perry Ponds Creek causing major silting issues for the creek and then flowing into the McDonald River causing silting issues that in turn will effort our iconic platypus population. What soil conservation plans are in place to control this erosion and what is the effect of the rainwater running off 1000's of solar panels will this in turn exasperate the soil erosion problem as all this water has to go somewhere and as the solar farm will be situation on granite soil which is very vulnerable to soil erosion by nature."
SE-61555711	"The increase in water through the washing of the panels will promote the underground water and cause further issues downstream. It will impact the underground water and will cause downstream properties to become additionally wet/boggy and in turn increase erosion. The granite soil type won't hold the pillions in place and will cause water cause issues. The granite soil erodes easily and moves easily."
SE-61539209	"Erosion is a huge issue with granite soil. I know this being a local land holder just 400m away from the proposed solar site. This soil is also unstable and will not support tilting solar panels in full operation. Isn't this why the Kentucky, NSW solar proposal was stopped? Please confirm the difference between the Bendemeer soil and that of the Kentucky, NSW soil."
SE-61522710	"Our soil is granite which filters water it doesn't hold water so the seepage dams they say they will put in will not hold water which means it will seep into the town water supply"
SE-61482457	"The ground is very prone to erosion – the project requires the removal of plants plus topsoil, which will ensure erosion is extensive."
SE-61418223	"The water and erosion issues are said to be addressed with a plan, however there are no details of this plan and how these issues are going to be addressed. I am very concerned about the extra run off of water from the panels, with the land being cleared and little to no ground cover how is the soil going to hold the water without causing erosion, this land has had not improvements done to it for such a long time that the soil is literally sand. The extra water that will run off this property and travel through gullies and water courses into the MacDonald River causing water logging of land that normally wouldn't be water logged"
SE-61093977	"Our soil in bendemeer is granite which filters water and doesnt hold the water that the solar farm say they can hold in seepage dams it will seep right through into the McDonald River in the town water supply"
SE-61439218	"The soil types and aquifer structures are especially delicate and cannot withstand such disturbance, nor will they tolerate the massive disturbance from either construction processes or the heavy vehicular movements across the site."
SE-61575707	"Clearly no proper assessment has been made of the impact of the construction roads and major earth works been made on a long term basis and no penalties proposed for breaches during the life of the project. Further the appropriate continuing supervision of the generation of additional run off has not been properly addressed."
SE-61426965	"Erosion-they stated it is premature to work out erosion control-if not now then when. This is after all the EIS."
SE-60896256	"granite soil is very prone to erosion when disturbed and the silting up of the river would be devastating not only to the river itself but also the town water supply"
SE-61429214	"The hydrology report leaves a big question mark on the under standing of the reporter of how the water flows through granite soil country. The

Submitter ID	Example Text from Submission
	concentration of the water run off from the panels will create even more underground streams and swamps than already exist impacting neighbouring land holder's immensely and adding to the issues of erosion in the scoured gully's to the north,west and south of the project creating more sediment build up at Bendemeer's pump site near the bridge on the New England highway. There has been consultation with the Applicants over these water issues however they don't think they need to address these concerns."

Erosion and sedimentation are identified as project risks in Section 6.8 of the EIS. The risk is typically highest during construction when there is land clearing works taking place and movement of vehicles and machinery. The EIS includes details of potential mitigation measures to help manage the risks during the life of the project in Appendix M.

The factors influencing the stability of the land are multi-faceted, including elements such as the soil type, ground cover, compaction, and disturbance rate. The Revised Universal Soil Loss Equation (RUSLE) outlined in "Managing Urban Stormwater: Soils & Construction" (Landcom, 2004) is a recognised method of estimating soil loss. This RUSLE method quantifies several variables which can affect stability of the land and provides an indication of sediment loads likely to be generated.

An erosion risk assessment for the Project Area has been completed using publicly available information. The risk assessment is provided in the updated Conceptual Soil and Water Management Plan (refer Appendix N of the EIS).

The soil erodibility factor for the Project Area is high, suggesting the topsoil is susceptible to erosion. However, other factors, such as rainfall intensity, slope length and steepness low within the Project Area. The quantified risk for the project, calculated in accordance with the RUSLE methodology falls within a low to moderate erosion hazard classification. Geotechnical studies will be conducted during the Project detailed design phase to further test the suitability of the soil.

The low hazard classification does not negate the need for erosion and sediment control measures to be implemented during construction and throughout the life of the Project. The low hazard rating indicates that the volumes of sedimentation generated by the Project (particularly during the construction phase) should be manageable by adopting typical best practice management techniques.

As outlined in the Conceptual Soil and Water Management Plan (Appendix M of the EIS), it is not feasible to develop detailed engineering designs of structures or identify location of all erosion controls across the site. The construction work will occur in stages, and progressive Erosion and Sediment Control Plans (ESCP) will be required as the project moves through construction stages. This allows risk to be managed proportionally across the Project. The progressive ESCPs will be developed in consultation with the construction contractor to ensure erosion risks are appropriately understood and managed in line with the construction methodology. The Applicant has committed to development of detailed construction phase management plans during the detailed design phase.

Impacts to Surface Water Resources

There were seventeen (17) submissions raised regarding potential concerns to the solar panels contributing to contamination of the Macdonald River and town water supply. There was one

(1) submission that raised highlighted the improvement of surface water quality from the Project when compared to alternative energy generation projects.

TABLE 4-46 PUBLIC SUBMISSIONS RELATING TO WATER QUALITY IMPACTS

Submitter ID	Example Text from Submission
SE-61529254	"The water produced from condensation on solar panels is not toxic unlike that produced from coal mines or gas fracking. I have seen that there is no regrowth in areas poisoned by toxic runoff which occurred years ago in the Pilliga gas fields in spite of regeneration efforts."
SE-61586707	"the run off from this project will enter the adjacent river which is a human and animal water supply. Damaged panels can release heavy metals. Who is signing off to take responsibility for the economic backlash of a contaminated beef or sheep carcase on our export market?"
SE-61438482	"The landscape is traversed by minor streams feeding to the MacDonald River. This is a site where Bells Turtles have been purposely bred and reintroduced in an effort to save the species within their natural environment. It is lunacy to endanger their existence and that of other native and migratory species by interrupting their existence here by operational and post operational contamination."
SE-61065957	"Soil testing undertaken at the teys loomberah solar farm has revealed that Cadmium has been leaching from solar panels, contaminating the soil into neighbouring properties. The granite soil in Bendemeer will allow this to spread much more rapidly into waterways. And with the Solar farm been directly beside the McDonald river, which is the source for Bendemeer drinking water, will be detrimental to human health"
SE-61396221	"The project is too close to the Macdonald river and any runoff from cleaning the panels would end up in the river."
SE-61236264	"My farming land uses the same river that will be connected to the Bendemeer solar farm as it is predicted to add pollutants to this river system in terms of contaminants which will negatively affect my livestock value and also the town water supply will be negatively affected."
SE-61195461	"The project will lead to pollution of the mc donald river system"
SE-61168989	"Concerned for water pollution to the River causing irreversible damage. It will be a horrible sight causing our little town to lose it's wonderful outlook and travellers to town."
SE-61102748	"when the cadmium leaks through our granite soil into our river which is the towns water supply & the heart & beauty of our town. All water leaving that project falls directly into our McDonald river"
SE-61578727	"Potential leakage of chemicals into watercourse and farmland;"
SE-61439779	"I am concerned about the impact on our native species of Bells Turtles and platypus in the Macdonald River and the impact of the water quality for stock and human contact - our children swimming and fishing in the river"
SE-61486221	"Erosion - water contamination - will flow on through the Gwydir, Barwon, Darling, Murray basins"
SE-61557958	"I am particularly concerned about the risk of toxic chemicals from the panels leaching into the McDonald River. I am very aware this is becoming an issue in Tamworth with a large solar project there - it would be an outrage if this was to happen in Bendemeer given that it is the villages only water source."
SE-61488469	"There is also the contamination issue from leaching of toxic chemicals from the panels to consider. This particular development is only 1 km from Bendemeer village, is beside the Macdonald River and on hills which are within the catchment of the village water supply."

Submitter ID	Example Text from Submission
SE-61272512	"solar panels require mining and minerals to produce, and the panels are extremely toxic to the environment. They are bad enough when they are "operating", leaching toxins into the soil and waterways around them every day..."
SE-61188304	"The impact of toxins coming from the site will leach into the water way being the McDonald River which supplies the town water."
SE-60946472	"More water will come to our farm and I won't be able to ride my horse across our gully out the back. Will it be dirty water? Will it go into the river? What about all the people who drink that water."

The Project layout has been arranged to avoid temporary and permanent impacts on the ephemeral waterways as much as practically possible. The potential impacts and mitigation measures are described in section 6.13 of the EIS, this section is supported by hydrological modelling presented in the in such a way as to minimise impacts on waterways.

The Hydrology Assessment (Appendix N of the EIS) presents modelling of the Project Area. The findings demonstrate the project will not create any significant adverse impacts to flood behaviour, either within the Project Area, or to downstream properties or floodplains.

Solar arrays do not typically pose a direct threat to water quality during normal operation. Solar panels are made up of several components, including a silicon-based semiconductor material, aluminium, glass, connectors and electrical wiring. The substances within the PV cells are bound within the solar arrays and cannot easily dissolve into water. Power transformers featuring oil insulation or inverters and BESS units featuring liquid coolant-based designs may leak if not correctly maintained or installed. As described in Appendix A of the Amendment Report, there will be environmental controls for oil and coolant bunding will be in place, through internal tray based bunding or dedicated bunding structures. The Applicant is committed to developing an OEMP which will include regular inspections and maintenance of the solar arrays and the associated systems. There are some specific risks to water quality within the Project Area as well as Macdonald River downstream during different phases of the project outlined below:

During Construction

There is a potential risk to water quality during construction from erosion and sedimentation. During the construction phase of the Project, the site will be subject to disturbance associated with site preparation and infrastructure installation/removal.

Construction works for the proposed solar farm include removal of vegetation, soil and site preparation works including excavation, levelling and compacting surfaces. The impact areas include the substation, battery energy storage system, access roads, temporary laydown area and underground cabling. Section 6.8 of the EIS outlines erosion and sedimentation as a potential risk, and mitigation measures are presented in Appendix M of the EIS.

The Conceptual Soil and Water Management Plan (presented in Appendix M of the EIS) describes the project construction should where possible, been designed to minimise direct impacts on watercourses. This includes minimising disturbance areas and undertaking works in stages.

Water quality impacts to groundwater during construction and operation are considered very unlikely due to the recorded depth of groundwater at the Project Area and the limited excavation proposed for the installation of panels and ancillary structures.

The use of fuels, lubricants, herbicides and other chemicals during construction may pose a risk of surface water contamination in the event of a spill. As part of the development of operational management plans, a Spill Response Plan (SRP) will be developed and included as part of the Emergency Response Plan (ERP). These plans will be reinforced with training for site workers.

If a spill or contamination incident does occur, the EPA will be notified of any incidents that cause harm to the environment, pursuant to sections 147 – 153 of the POEO Act.

During Operation

The potential for the Project to impact soils and surface water quality during the operational phase, after the disturbed areas and construction compound have been rehabilitated, is minimal. The substances within the PV cells are bound within the solar arrays and cannot easily dissolve into water.

Routine maintenance and monitoring will be the extent of the day-to-day activities and is not likely to have any impact to surface water quality.

An Operations Environmental Management Plan (OEMP) will be implemented that includes the day-to-day procedures and allocation of responsibilities to minimise impact to water quality throughout the operational life of the solar farm.

To maintain water quality, the objectives of the OEMP seek to establish a healthy, self-sustaining, improved pasture over the solar farm that will minimise erosion, provide fodder for sheep grazing and be manageable in terms of weed control and hazard reduction (fuel loads). Localised erosion will be managed if present.

The use of fuels, lubricants, herbicides and other chemicals during operation pose a risk of surface water contamination in the event of a spill. Management of sewage systems pose a risk to surface water quality should spills occur.

Storage, handling or use of any potentially dangerous substances would be in accordance with the relevant Australian Standards and Guidelines for Storage and Handling of Dangerous Goods by WorkCover NSW. At disposal, hazardous materials (fuels, lubricants, chemicals, herbicides, etc) will be transported offsite or disposed in accordance with the relevant legislative requirements under the POEO Act and Council requirements.

At Decommissioning

Solar panels and BESS components would be disposed of at a licenced facility or, if available, a recycling facility. As stated in Section 3.6 of the EIS, an assessment of decommissioning options will be undertaken later in the proposed operating life of the Project. The Applicant has committed to funding and executing the decommissioning of the Project where material recycling will be discussed in detail in the DRP prepared by the Applicant, subject to emerging technologies and resource recovery infrastructure.

Several comments raised above relate specifically to cadmium. Cadmium telluride panels are one of several potential technologies available from a range of manufacturers, other common technologies include mono-crystalline silicon (sc-Si), multi-crystalline silicon (mc-Si), and copper indium gallium diselenide (CIGS). PV modules constructed from silicon-based technologies command the vast majority of market share, particularly in Australia, and are proposed for use in the Project. Cadmium-based technologies are not being considered.

As stated in Section 1.2 of the EIS, the Applicant has committed to integrating internationally recognised environmental standards into their business practices. This will include selection of a manufacturer with robust environmental credentials for their products.

Concerns raised about contamination issues at other sites is outside of the scope of assessment for the Project.

Impacts to Groundwater Resources

There was one (1) submission raised regarding potential concerns of contaminants leaching into the underlying aquifers.

TABLE 4-47 PUBLIC SUBMISSIONS RELATING TO GROUNDWATER QUALITY IMPACTS

Submitter ID	Example Text from Submission
SE-61439218	"The soil types and aquifer structures are especially delicate and cannot withstand such disturbance, nor will they tolerate the massive disturbance from either construction processes or the heavy vehicular movements across the site."

Impacts to the groundwater may occur from infiltration of impacted surface water across the site surface. As described in Appendix A of the Amendment Report, there will be environmental controls for oil and coolant bunding will be in place, through internal tray based bunding or dedicated bunding structures. It is unlikely that surface water will be impacted from the development and hence impacts to groundwater upon implementation of controls to mitigate these risks. The Applicant is committed to developing an OEMP which will include regular inspections and maintenance of the solar arrays and the associated systems.

4.2.5.7 TRAFFIC

Road Degradation

There were seven (7) submissions raised regarding concerns relating the degradation of the proposed transport route. There was one (1) submission raised that highlighted the benefits from road upgrades associated with the Project.

TABLE 4-48 SUBMISSIONS RELATING TO CONCERNS OF ROAD DEGRADATION

Submitter ID	Example Text from Submission
SE-61326724	"The project will see essentials upgrades to local infrastructure that would otherwise not be considered as a priority due to the low number of residents in the town of Bendemeer."
SE-61588494	"62 additional truck movements daily will incur significant wear to the roads-how will this be managed? Traffic Management Plan referenced but without reading this how can the public be confident that this will be done. Who is responsible for actioning these plans and dealing with issues that arise"
SE-61531962	"Noise, dust, truck and machinery movement, road damage and road kill will become unbearable""
SE-61522710	"Increased traffic on roads that are in poor condition already"
SE-61418223	"The EIS advises that the number of trucks/ vehicles that will be required will be in excess of 200/ day on the local roads, the roads will not be able to stand up to this, which will result in the destruction of the roads and then extra delays due to the roads needing to be fixed on an ongoing basis. Who is required to cover the cost of this up grade."
SE-61486221	"There will be damage by access roads not included in the project site which aren't capable of continual heavy traffic in construction and maintenance. Typically they aren't maintained so more erosion will be caused. (Who will maintain them and prevent future damage? Is it the landowner again?)"
SE-61188304	"The impact of additional traffic on our roads will destroy the quality of our roads."

The additional heavy vehicles resulting from the construction of the Project would only be generated on the surrounding State Road network, as opposed to the local Council Road network. TfNSW is responsible for maintaining the State Road network.

The State Road network is the primary network of principal traffic carrying and linking routes for the movement of people and goods throughout the State. State Roads are designed and constructed to a higher standard to accommodate heavy vehicle traffic. Both Oxley Highway and New England Highway are approved roads for B-Double heavy vehicles.

The Applicant is working with TfNSW to develop a Traffic Management Plan (TMP) to ensure vehicle movements generated by the Project are managed to avoid or minimise impacts to the road network and users. This plan will incorporate all mitigation measures that are proposed in the EIS and additional measures in response to the amended Project (refer Appendix B of the Amendment Report). These mitigation and management measures are designed to minimise the impacts to roads during the construction phase (including from OSOM vehicles).

On this basis, the TIA and Updated TIA (refer Appendix O of the EIS and Appendix L of the Amendment Report) indicates that the capacity of the New England Highway and Oxley Highway is easily adequate to safely cater for the additional traffic volumes generated during all phases of the Project.

Route Suitability

There were eleven (11) submissions raised regarding the suitability of the proposed Project route.

TABLE 4-49 SUBMISSIONS RELATING TO CONCERNS OF THE SUITABILITY OF THE PROJECT ROUTE

Submitter ID	Example Text from Submission
SE-61161015	"The roads are not built to withstand large machinery continually the Oxley Highway is only 2 narrow lanes that aren't in good condition already"
SE-61160970, SE-61093977, SE-60991709,	"The roads are not built to withstand large machinery continually the Oxley Highway is only 2 narrow lanes that aren't in good condition already, the lanes are less then the 3.6 required and are only 3m lanes"
SE-61578727	"Roads and bridges are not sufficiently roadworthy for the amount of construction vehicles to access the area, again locals will suffer the burden"
SE-61438482	"Roads stabilisation for traffic and construction methods on those soil types require diversion of water which in turn impact productivity across the landscape. This land is not suited to a multiplicity of roadworks across the ground."
SE-61537502	"Access to our property will be affected during the build phase"

The surrounding road network is rated to accommodate the heavy vehicle movements generated by the project. The roads utilised by the project are State roads and have been designed to accommodate the construction transport vehicle loads associated with the Project. Larger OSOM vehicles are subject to individual permits and the suitability of the roads to accommodate the loads is assessed as part of the application process to ensure the vehicle used is suitable for the road network.

Access Concerns

There were two (2) submissions that were raised regarding access concerns from construction traffic.

TABLE 4-50 SUBMISSIONS RELATING TO ACCESS CONCERNS

Submitter ID	Example Text from Submission
SE-61537502	"Access to our property will be affected during the build phase"
SE-61439218	"Not only is it imperative that provision for access from the Port of Newcastle right through the most difficult portions of road access is clear, but there must be adequate response available in the case of emergencies."

The TIA (refer Appendix L of the Amendment Report) has provided measures for consultation with neighbours regarding the timing of major deliveries that may impact residential access. This notification will occur prior to the commencement of construction and through the construction period.

Modelling of the road network at key intersections has predicted a 2 second delay during peak hour traffic (refer Appendix O of the EIS and Appendix L of the Amendment Report). Therefore, the additional traffic generated during the construction phase of the Project is not anticipated to impact the response times of emergency services.

Safety Concerns

There were seven (7) submissions that were raised regarding safety concerns from construction traffic.

TABLE 4-51 SUBMISSIONS RELATING TO SAFETY CONCERNS

Submitter ID	Example Text from Submission
SE-61539209	"The roads in front of my residence are not safe to enter and or exit in their current state. This is already unsafe to do so in a 100km per hour traffic area, let alone when an extra 200 trucks a day start using these. Our driveway is located at the top of a raise in a 100km per hour area. We are not just impacted by insufficient lane widths but now will also be impacted by high truck usage."
SE-61420238	"The Oxley Highway is already a busy road, and turning in from the New England Highway will cause considerable dangerous conditions for motorists and the many truck drivers."
SE-60988961	"The New England Hwy will become even busier and more dangerous with the increased traffic."
SE-60960724	"The additional 200 plus trucks using our roads will not only damage the quality causing hazards for motorists and locals who use these roads but will also cause congestion on our roads. Living within close proximity to the road, the additional noise, dust and vehicle traffic will impact my quality of life."
SE-61584957	"Will cause traffic congestion through the small village and surrounds, and possibly lead to higher pedestrian risk, including to school children who are not used to large vehicles on their narrow rural roads, and dust and pollution from increase traffic volume"
SE-61537502	"Access to our property will be affected during the build phase and in particular emergency services may not be able to reach their destination"
SE-61539209	"The roads in front of my residence are not safe to enter and or exit in their current state. This is already unsafe to do so in a 100km per hour traffic area, let alone when an extra 200 trucks a day start using these. Our driveway is located at the top of a raise in a 100km per hour area. We are not just impacted by insufficient lane widths but now will also be impacted by high truck usage."

The surrounding road network can accommodate the vehicle movements generated by the project based on the assessment undertaken to inform the TIA which was undertaken in accordance with relevant guidelines and standards. The surrounding intersections have been assessed against safety guidelines and the site access is proposed to be designed with relevant turn treatments to allow vehicles to safely enter and exit the Project.

A consultation program will be initiated with the Bendemeer community to assist in managing traffic impacts to the Project (refer Appendix L of the Amendment Report). These measures will include providing key contact personnel and contact details, provision of a website for the recording of complaints, contact with neighbours through letter drops and emails and press release in local newspapers.

Other safety measures that will be adopted include management of vehicular access to and from the site and the development of a Driver Code of Conduct to ensure employees are trained to reduce risks to the public.

Congestion and Delays

There were eight (8) submissions raised regarding potential impacts to road congestion and traffic delays. There was one (1) submission that stated that traffic from the Project was unlikely to have impacts on the village.

TABLE 4-52 SUBMISSIONS RAISING CONCERNS ABOUT ROAD CONGESTION AND DELAYS

Submitter ID	Example Text from Submission
SE-61390713	"The construction will have minimal impact on the village as the highway bypasses the village so trucks and vehicle movements will not travel through the village."
SE-61195461	"Will impact traffic in the local area causing delays and road damage."
SE-61169004	"I currently travel the Oxley highway for work. This will have a huge impact on my travelling. Will I have to leave early morning/ late night so I'm not waiting on road work during construction stage?"
SE-61586707	"Traffic— there is one road in for all infrastructure, the New England Highway...We have a farm not far from Bendemeer. How are we going to get our stock to market and run our day to day business?"

A TIA was conducted for the Project during the EIS and concluded that the road network was sufficient to meet the requirements of the Project without significant impact to current road users and was concurred from the Updated TIA (refer Appendix L of the Amendment Report).

Considering the additional 69 total vehicle movements generated during peak hour within the peak construction period (i.e. worst-case traffic congestion scenario), SIDRA modelling of the New England Highway and Oxley Highway intersection during the peak construction period stated that there would be an overall average delay of 2.3 seconds per vehicle during both the morning and evening peak hour. This analysis concluded that the intersection is expected to operate with minimal queue lengths on all legs and maintain the 'A' level of service rating.

The additional 30 total vehicle movements per day generated during the operational period is a negligible increase in traffic volume compared to the construction period. Therefore, the surrounding road network can accommodate the vehicle movements generated by the Project during the construction and operational periods based on relevant guidelines and standards.

4.2.5.8 HAZARDS

BESS Fire

There were five (5) submissions that were raised voicing concerns regarding hazards from fire within the BESS.

TABLE 4-53 PUBLIC CONCERNS RELATING TO BESS FIRES

Submitter ID	Example Text from Submission
SE-61482457	"The project is on bushfire prone land and with so many lightning masts being installed suggest has a huge potential to be struck by lightning. The most recent fire was in April 2023 and bordered this property only being stopped by the local fire service."
SE-61454959	"If a fire gets to the BESS we will have an electrical fire which will not be able to be put out, emitting toxic fumes, and if the wind is blowing towards Bendemeer, we will have to evacuate"
SE-61426965	"Known fire area. Granite soil attracts lightning strikes. They said BESS can explode with a lightening strike."
SE-61587241	"Increased, Seriously Toxic - Carcinogenic & Teratogenic Fire/Smoke Hazard Risk"

Submitter ID	Example Text from Submission
SE-61606458	"Solar Electricity Generating Works are an increased fire risk & toxic smoke hazard - which has not even been researched yet by NSW Fire & Rescue. It therefore, is completely inappropriate to locate this fire hazard in this uncontaminated rural food producing area where it would pose a serious danger to all forms of life."

The preliminary Hazard Analysis (PHA) (refer Appendix P of the EIS) conducted a risk assessment for fire and toxic gas dispersion for the Project and determined the hazard risk to be low.

The Bushfire Impact Assessment (refer Appendix Q of the EIS) recommended that an asset protection zone (APZ) be established around the solar farm infrastructure. Given the recognised heat sensitive nature of the BESS, substation and associated infrastructure, larger APZ and setback dimensions than those required as per the NSW RFS Planning for Bushfire Protection Guidelines (2019) have been included within the EIS.

The mitigation and management measures (refer Appendix B of the Amendment Report) for the Project are considered adequate to minimise any risks from the BESS and exceed the minimum requirements of the NSW RFS Guidelines.

Health

There were five (5) submissions raised regarding potential health impacts from electromagnetic fields and electricity.

TABLE 4-54 PUBLIC CONCERNS REGARDING POTENTIAL HEALTH IMPACTS

Submitter ID	Example Text from Submission
SE-61343213	"Has there been any serious risk assessment done on the physical and psychological effects from the electromagnetic fields and noise given off from this solar wind farm"
SE-61584976	"while the solar panels themselves may be low risk in radiation the equipment provides a risk of exposure to radiation that could cause harm to people, pets and livestock."
SE-61587231	"while solar farms are generally considered safe, opponents might voice concerns about potential health impacts of living in close proximity to a large array of solar panels, such as electromagnetic fields or other factors."
SE-61537502	"Location of the sub station and battery storage is very close the R1216. The risk of fire, noise or other negative externalities would suggest moving the substation to a different part of the hosts property and would help mitigate any concerns. The existing high voltage lines extend from the SW to the NE of the property, with the proposed sub station near the NE boundary (which is very close to residence R1216.) Moving the substation further to the SW would be a preferable alternative. There are also health concerns about having so much energy so close to a residence."
SE-61429209	"What evidence does the applicant provide to prove to Bendemeer residents that their are no health concerns they should have with regard to the close proximity to their homes of the substation and BESS? Many in the community have complained of mental health issues and stress related to the fear and worry of this large scale development in their quiet rural community and the negative impacts it will have on their collective and individual circumstances going forward."

Electrical magnetic fields were assessed as part of the Preliminary Hazard Analysis (PHA) and Updated PHA (refer Appendix P of the EIS and Appendix M of the Amendment Report). The Updated PHA determined that from the typical EMF levels that would be generated by the Project would be below the prolonged exposure limit of 2,000 mG within a 24h-hour period (International Commission On Non-Ionizing Radiation Protection (ICNIRP), 2010). There are no immediate residences adjacent to the area where major project components will be sited, providing over 1 km of separation/attenuation of EMFs. Some residences are closer to smaller, individual project components that may emit EMF, such as PCUs; however, these sources would not exceed the 2,000 mG limit for prolonged exposure. Importantly, there is an existing notable EMF source - the 330 kV Tamworth to Armidale transmission line (Line 86). It was determined that, cumulatively, the solar farm infrastructure EMF sources combined with the existing levels of EMF from line 86 would not exceed international guidelines; therefore, this incident was not carried forward for further analysis.

The NIA (refer to Appendix J of the EIS) addresses risk associated with noise. The quantitative criteria in the Noise Bulletin used for the assessment addresses physical and psychological effects.

4.2.5.9 BUSHFIRE

Access Concerns

There were six (6) submissions received regarding access concerns in the event of a fire.

TABLE 4-55 PUBLIC CONCERNS RELATING TO ACCESS TO FIGHT BUSHFIRES

Submitter ID	Example Text from Submission
SE-61588494	"How will bushfire risk from Oxley highway be managed? Fire trucks cannot access the solar footprints easily so what will be used to put out any fires? What kind of air pollutants will be present if the solar panels burn?"
SE-61568505	"Bendemeer has a small voluntary ageing rural fire brigade and the threat of a fire occurring in or near the solar farm is a high risk as we saw with the Moonbi fires a few years ago coming within close proximity of the solar farm area. Bendemeer has severe lightning strikes, the risk of fire (manmade) due to closeness of the Oxley Highway by way of a cigarette butt or deliberately lit or from heavy transport is an ongoing concern as seen by recent roadside fires. A fire can quickly become a raging inferno with the long vegetation mainly love grass and undergrowth that is around the proposed area. The solar farm panels maybe in a cleared area but what about the outside perimeter. Our fire brigade does not have the resources and manpower to cope with a fire outbreak and Tamworth brigade is a minimum time of forty minutes away to assist."
SE-61575707	"The fire risks have been glossed over and the total project generates significant risk and there are no suitable properly funded ongoing safety and maintenance regimes proposed for such a major industrial project."
SE-61539209	"If rainwater naturally falls onto the ground, it soaks up naturally. Now with 436,000 panels spanning acers and acers, this will create catastrophic environmental impact for our family as we use the rear of our farm as an emergency bush fire escape route. With this extra and excess water run-off, this will prohibit myself and my family from quickly and safety exiting to rear of our property in the case of an emergency bush fire."

Submitter ID	Example Text from Submission
SE-61418223	"The fires that broke out on the late afternoon of early April after so much rain only 3 days before not only caused stress to the local community (there was a fire out of control) it burnt stock feed on the property where is originated, there were local fire trucks bogged and sadly the local brigade lost a new fire truck (burnt on the fire ground), and as a neighbouring land owner I needed to move stock to a safe location, we had in excess of 10 trucks/ vehicles in and out of our property and the brigade needed to gain access to the fire through our property and had to cut the fence to gain access."
SE-61489047	"I object to all major solar projects as they disrupt the ability for neighbouring farms to carry out normal farm activities such as fire mitigation and preparation of paddocks with fire."
SE-61169004	"Bush fire or fire in general. Are the panels separated enough to get a fire truck in to put the fires out??"

Access requirements for the Project to mitigate bushfire risk are included in Section 3.3 of Appendix Q in the EIS and will be maintained in accordance with the requirements of NSW RFS Planning for Bushfire Protection Guidelines (2019). Additional measures that will be considered during detailed design to mitigate fire risks include:

- Compliance of internal access roads to meet the specifications of the Planning for Bushfire Protection Guideline 2019;
- A minimum 10 m APZ around the solar arrays that permits unobstructed vehicle access is to be provided around the perimeter of the Disturbance Footprint;
- The location of all fire trails and provision of gates will be confirmed during detailed design and following consultation with the Tamworth Fire & Rescue and RFS as part of the Bushfire Emergency Management and Operations Plan; and
- The Project Area will be remotely monitored 24 hours a day and maintain continuous communication capability with Tamworth Fire & Rescue and RFS as part of the Bushfire Emergency Management and Operations Plan.

Increased Fire Risk

There were twenty (20) submissions received regarding concerns of increased fire risk to the project.

TABLE 4-56 PUBLIC CONCERNS RELATING TO INCREASED FIRE RISKS

Submitter ID	Example Text from Submission
SE-61575995	"Bushfire prone land (fire April 2023 stopped just before solar land host boundary) (Moonbi Complex Fires 2019 - village cut off from Tamworth several days)"
SE-61575707	"The fire risks have been glossed over and the total project generates significant risk and there are no suitable properly funded ongoing safety and maintenance regimes proposed for such a major industrial project."

Submitter ID	Example Text from Submission
SE-61539209	"If rainwater naturally falls onto the ground, it soaks up naturally. Now with 436,000 panels spanning acres and acres, this will create catastrophic environmental impact for our family as we use the rear of our farm as an emergency bush fire escape route. With this extra and excess water run-off, this will prohibit myself and my family from quickly and safely exiting to rear of our property in the case of an emergency bush fire...I currently have 20 million dollars in public liability. If a controlled back burn and or fire was to get out of control and travel through this solar farm and caused extensive damage, I'm not do not have enough public liability to cover me for a possible event such as this."
SE-61584957	"Exacerbates the fire risk and thus insurance costs,"
SE-61535035	"High fire danger from the development."
SE-61489047	"I object to all major solar projects as they disrupt the ability for neighbouring farms to carry out normal farm activities such as fire mitigation and preparation of paddocks with fire. They also create significant financial impact on farms through significant increases to insurance premiums. I will not agree to this project"
SE-61283034	"Bendemeer is notorious for bushfires and if a solar farm was to burn to the ground on top of the range we would run the risk of polluting not only the associated farmland but many rivers that feed into the community supporting tourism and the agriculture businesses of many families."
SE-61429214	"The increased fire issues that will come from the build up of love grass growing under the panels will have a significant increase in fuel load that is very hard to control with sheep grazing because they don't eat love grass. Cattle will eat it when very hungry however cattle can't graze under the panels. This risk was proven in April when a fire ripped through the front of riverside (the property that is proposed for this development) only 3 days after 90 millimetres of rain. The fuel for fire that love grass creates is significant. This risk can be minimised with 5 years of control measures to promote other grasses growing but it will be a big issue with the time line that they want to do this in. This opinion comes from someone with over 20 years of RFS experience and proven pasture improvement experience"
SE-61486221	"What power does the NSW Government have to force the Lessee to control wild fires near electric equipment and what compensation will the Government guarantee to pay neighbours and the communities for fire damage caused by onsite fires? Will the landowner be responsible and if so, will the landowner be required to provide a bank guarantee to pay the insurance premiums?"
SE-61564215	"Consisting of so much electrification, the Bendemeer Solar Farm will create an extreme fire hazard to surrounding areas, particularly on a Total Fire Ban Day with the temperature at 43dC and a NW wind blowing at 50km/hr. Being so tightly packed together it would almost be impossible to contain a fire started within the Bendemeer Solar Farm perimeter. Particularly as fire fighters proclaimed Solar Farms as 'No Go' areas. The surrounding land owners, towns and Cities of Walcha and Armidale should be very concerned about their welfare and safety."
SE-60890745	"We can have beautiful producing seasons in Bendemeer, and we can also have dry fire seasons do you understand that fire will roar in dry times up that hill as it has done incinerating the solar panels"
SE-61429209	"Why if it is a SEARS requirement that the location of solar energy infrastructure should avoid any land subject to a hazard like bushfire is this project located in such an area?"

As the Project is located on bushfire prone land, minimum APZs and setbacks were considered as part of the Project design (refer Section 6.11 of the EIS) and will be provided in accordance

with the NSW RFS Planning for Bushfire Protection Guidelines. The area of defendable space provided for the BESS, substation and associated infrastructure will be based on a 29 kW/m² radiant level threshold and will exceed the 10 m APZ recommended in the NSW RFS guidelines and will range 12-31 m based on surrounding vegetation categorisation, including slight Disturbance Footprint adjustment to accommodate minimum 31 m APZ adjacent to some areas of the BESS in proximity to Box Gum Woodland TEC.

Site access points will be constructed as the first stage of development and the final design of access roads will enable safe access and egress for residents attempting to leave the area at the same time that emergency service personnel are arriving to undertake firefighting operations.

The ongoing management and monitoring of the grassland will be considered as part of the Bushfire Emergency Management and Operations Plan. The mitigation measures and treatments will be a combination of complementary strategies. However, despite any mitigation measures applied, bushfire risk will always remain and is not strictly within the Applicant's control. For example, insurance liability relating to bushfire is a result of various factors. The Project is not expected to impact adjoining properties undertaking lawful farm management activities such as backburns; however, Metis is committed to prepare the Bushfire Emergency Management and Operations Plan in conjunction with relevant stakeholders, including NSW RFS, NSW Fire and Rescue, landowners and adjoining property owners to provide the best possible protection outcome for the solar farm and the community.

4.2.5.10 AIR QUALITY

There were three (3) submissions raised that highlighted the overall benefit to air quality by transitioning to renewable energy.

Dust

Four (4) submissions were raised that expressed concerns regarding the generation of dust as a result of the Project construction.

TABLE 4-57 SUBMISSIONS RELATING TO DUST GENERATION DURING CONSTRUCTION

Submitter ID	Example Text from Submission
SE-61575999	"The dust and mess it will create when under construction."
SE-61489021	"there is lots of dust that makes my asthma bad"

Exposed surfaces such as material loads and soil stockpiles will be kept moist where practicable, stabilised progressively and revegetated as per the safeguards in Section 6.12.4 of the EIS. The management of dust-suppressing water use will be applied while considering safeguards relevant to erosion and sediment controls (Section 6.7.8 and 6.8.4 of the EIS).

4.2.5.11 WASTE MANAGEMENT

There were twelve (12) submissions that expressed concerns relating to the generation of waste from the Project.

TABLE 4-58 SUBMISSINOS RELATING TO WASTE MANAGEMENT

Submitter ID	Example Text from Submission
SE-61588494	"Waste Management Plan, weed management plan and vegetation management plan. All these plans have been referenced but if the public are unable to read them how can they be sure these plans will be sufficient, implemented and regularly updated? Also what are the consequences if these plans are not adhered to?"
SE-61575707	"Again no properly funded and clearly enunciated ongoing waste management program is detailed except "motherhood" statements that "measures" will be implemented."
SE-61488279	"Where are you planning to put the toxic waste materials"
SE-61341966	"Will put the residents of Bendemeer at risk whe the solar panels and turbines reach their use by date and have to be disposed of as they will be TOXIC waste"
SE-61587241	"Creates a Massive Pile of Unplanned for Toxic Waste"
SE-61418227	"Presently the DPE, EPA and all LGA's do not have a Waste Management Plan for the disposal of PV Solar panels. Until this absurd situation is satisfactorily resolved and an environmentally acceptable plan is legislated, I call on the NSW government to initiate a moratorium on the approval of all solar farms."
SE-61429209	"The future decommissioning of the project and its impacts will be determined in the future – it will be an enormous burden of waste to be disposed of."

A Waste Management Plan (WMP) will be developed for the Project that considers various options for diversion of waste from landfill and detailing the waste streams during construction of the Project. The WMP will be prepared in consultation with TRC prior to construction. This WMP will be incorporated into the CEMP and will be prepared prior to the commencement of construction. At a minimum, the WMP will incorporate the measures outlined in Section 6.13 of the EIS.

As outlined in Section 3.6 of the EIS, the Project will operate for a minimum of 30 years. At the completion of the Project, the decommissioning options will be assessed in detail and a DRP will be prepared. This plan will be prepared closer to the decommissioning date to ensure that the most up to date best practice measures are incorporated. Decommissioning and Rehabilitation Management was discussed further in **Section 4.2.2**, particularly regarding recycling initiatives to reduce the volume of solar components that would be disposed of in landfills.

There were 17 waste facilities that were identified in the EIS (refer Section 6.13), with the accepted waste streams and the licensed facilities for the development laid out. A Waste Management Plan will be prepared prior to construction to manage waste during the construction and operation of the Project.

Disposal of materials upon decommissioning will be detailed in the DRP, subject to emerging technologies and resource recovery infrastructure. Refer to **Section 4.2.2.2** for details.

4.2.5.12 ECONOMIC

Property Values & Real Estate Prices

Thirty-eight (38) submissions were raised regarding concerns for decreased property values surrounding the development. These are discussed with the property value submissions below.

TABLE 4-59 PUBLIC SUBMISSIONS REGARDING DECREASED PROPERTY AND REAL ESTATE VALUES

Submitter ID	Example Text from Submission
SE-61575995	"Negative effect on property prices due to impact on views, peace & quiet to be destroyed with 24/7 noise from industrial plant"
SE-61529238	"My family farm property will devalue between 30-40%"
SE-61482457	"The project will ruin our views and we have worked hard for what we have and that is where the primary value of our property is. Building this ugly project on the Moonbi Ranges is a disgrace and should not be allowed to proceed. You will hurt us financially as well as personally"
SE-61065957	"It has also been found that Properties in and around the Solar farm have been by devalued 35%."
SE-61584957	"Devaluation of property prices. Who is to compensate the owners for that loss."
SE-61575707	"Such a huge industrial project will severely adversely impact the value of all adjoining land and landholders will be left with virtually unsaleable properties. This impact on values will also impact landholders' ability to borrow to finance operations."
SE-61555711	"While the hosts of these industrial sites make a fortune from their once viable agricultural land the surrounding neighbours' assets are adversely negatively impacted and devalued. Not only will it decrease the value of the neighbouring properties like ours who is impacted the entire length of our property, but it will also decrease the number of interested parties"
SE-61531962	"Property values will fall. No one wants a home near transmission lines, flashing lights, whooshing turbines and a huge blacked out if solar panels"
SE-61420238	"My property was purchased in 2017 using superannuation that I have worked hard for all our lives. I plan to build my retirement home in the near future on the property. However, my plans and financial security is now at great risk as real estate prices will decline dramatically once the solar farm project is given approval."
SE-61093977	"we have farmed our farm for 5 generations and cant sell the property and if we did we would have decreased real estate values of up to 30% I know this as my wife is a real estate agent and sells alot of property in Bendemeer and it has started already with people not wanting to purchase here"

There is no evidence to suggest that large-scale solar developments affect the land value of neighbouring properties. While it is acknowledged that effects on land value (positive or negative) are of great concern to the community and landholders, this issue is outside the scope of what the consent authority can consider in making a determination on a DA.

The economic value of private land is determined by the interaction of demand and supply in the market, with the market price for land reflecting the willingness to pay of a potential purchaser. Willingness to pay reflects the discounted future potential returns from the land (whether from agriculture, rural residential uses, mining and extractive industries, recreation uses and potential (real or otherwise) to convert to higher value uses (e.g., rural residential, urban, industrial or commercial uses). These potential future returns reflect the structural, access and environmental attributes of the land.

Structural attributes include lot size and shape, house attributes, other property improvements, land capability, resource endowments, current zoning, future subdivision potential, road frontage, water, sewerage, electricity, communication services etc.

Access includes proximity to major cities and the employment and community and the social services this offers.

Environmental attributes that are associated with the Project Area surrounds include:

- Noise, water quality and scenic amenity - all of which positively impact land values;
- The presence of native vegetation and biodiversity - which can have a positive impact on private land values in terms of amenity and a negative impact on private land values in terms of restrictions on current and potential use of the land; and
- The presence of hazards such as flood prone land and bushfire hazard - which reduce private land values by limiting land use opportunities or increase land values by supporting particular farming activity e.g., floodplains.

Structural and access attributes of properties tend to be the major driver of land value in rural areas. The value of private lands on the urban fringe are potentially determined by both agricultural characteristics of the land (i.e., future potential agricultural returns) and urban influences including access to the urban area (and associated physical and social infrastructure including employment, schools, hospitals etc.) and potential for urban conversion.

Where no potential for urban conversion exists, potential agricultural production and/or access to urban areas (employment and physical and social infrastructure) are likely to be major potential determinants of land values. Given enough distance from an urban area, land parcels are valued for agricultural uses only (Guiling, Brorsen, & Doye, 2009) and land values increase linearly with size.

The existence of any impacts of the Project on nearby properties would be dependent on actual or expected physical impacts (e.g., noise or visual impacts) from the Project. Where impacts on nearby properties are contained or negligible, no property value impacts would be expected to occur.

The Addendum LVIA indicated a 'low' visual impact rating for non-associated dwellings within 4 km of the projects and public viewpoints. The Updated NIA indicated that no non-associated receivers are predicted to exceed the NPI PTNLs. It found that during the construction period there may be some intermittent exceedances of Noise Affected Management levels at times at sensitive receptors under the worst-case construction noise scenario. However, these would be sporadic activities within the temporary 18-month construction period and would be managed via the implementation of a construction noise management plan. Consequently, there is no evidence that the Project will impact the value of adjoining property values.

Tourism and Local Businesses

There were three (3) submissions in support of the Project and three (3) submissions in objection. There were 35 submissions raised that supported the diversification of economic opportunity arising from the Project, in particular the boost to local and regional business.

TABLE 4-60 PUBLIC SUBMISSIONS REGARDING DECREASED TOURISM

Submitter ID	Example Text from Submission
SE-61400457	"It will create jobs, put workers into accommodation, fill cafe's and pubs, and potentially fill local schools with new families all of which are important in terms of preserving dwindling rural communities."

Submitter ID	Example Text from Submission
SE-61548708	"The project is a significant opportunity for the New England region to diversify its economy; support and increase the local population; and see flow-on social, economic and environmental benefits from the Project, and others like it."
SE-61040465	"Investing in the Bendemeer Solar Farm will have a positive impact on both the regional and state economy. The construction phase will create a surge of job opportunities, greatly benefitting the local community, and stimulating economic growth. Skilled workers from various fields, such as engineering, construction, and project management, will find employment opportunities, leading to increased disposable income in an area which is largely agricultural and small business oriented."
SE-61587231	"Solar farms consist of large arrays of solar panels spread across vast areas of land. Some residents might argue that these solar panels could disrupt the natural landscape and scenic beauty of the Bendemeer area, affecting its visual appeal and potentially impacting tourism."
SE-61529238	"The solar farm is unsightly and close to the town, with the solar farm coming to bendemeer it is dividing the town and will drive away the tourism to the town."
SE-60960724	"Bendemeer is known for its beauty. This site will be visible from the entire Bendemeer community due to its extremely close proximity to the town (I believe it is the closest one proposed to any township). The few local businesses that we have and rely on in our town will be drastically impacted by the impact on tourism. I don't know of any tourist that would love to stop and view a black wall of solar panels."

To the extent that the businesses in Bendemeer can provide the things that are demanded by workers on the Project, or inputs to the Project itself, those businesses will economically benefit from the Project during construction and operation.

Potential impacts on tourism may arise if existing tourism locations or amenity were physically impacted by the Project. Visual and noise impacts from the Project (refer Appendix H and I of the Amendment Report) at sensitive receptors have shown to be low and unlikely to impact on the township of Bendemeer itself. Tourism within Bendemeer is not expected to be impacted in this regard.

There is an emerging field of study related to energy tourism which showcases aspects of renewable energy developments to the public where examples include guided tours, local event hosting and art installations (Frantàl, 2014). Developments with visitor centres were shown to have high visitation where those with unique visual aspects (e.g. wind turbines, geothermal plants) presented the highest numbers (Beer, 2017). This may be explained by their modern design, scale and proportion, and uniqueness within a region. A 2015 research report on the positive and negative impacts of renewable energy developments on tourism suggested that residents near such developments may harbour more negative attitudes than tourists due to static vs. mobile behaviours (Prinsoo, 2015). In Switzerland, it was shown that the local vs. visitor perceptions and attitudes of PV modules within a rural alpine village had no significant difference in accepting their installation due to recognising their purpose and function (Michel, 2015). Therefore, tourism is suggested to be driven largely by social aspects that depend on community perception and tourism value, and the interplay between local economic stimulus and the overall purpose of the development.

The Updated SIA (refer Appendix O of the Amendment Report) discusses the positive and negative social impacts relating to tourism and whether the region's economy may benefit during construction and operation of the Project. Management measures aim to mitigate grievances and maintain workforce influx/outflux to balance the supply and demand of local services and accommodation, and these elements are readily observable. However, the intrinsic aspects of tourism will depend on the ongoing management of social impacts as these elements are more subjective. Existing management measures aim to minimise adverse impacts as they arise.

Capital Investment Value

There was one (1) submission that raised a concern regarding the capital investment value (CIV) of the Project.

TABLE 4-61 PUBLIC SUBMISSIONS REGARDING CONCERNS OF CAPITAL INVESTMENT VALUE

Submitter ID	Example Text from Submission
SE-61429209	"The Capital Investment Value of \$465,840.357 – for permanent fixed assets. This is not for the land upon which the project sits as it is owned by a resident of Sydney. If this Capital Investment Value is for the equipment arriving at Brisbane and Newcastle Ports and from Melbourne – how is this Capital Investment Value a benefit to Bendemeer? What land or equipment has been purchased in the local area for this project? In arriving at Ports SOS summarises that all equipment is from overseas suppliers and not from Australian suppliers – is this correct??"

The reporting of the CIV of the Project is a requirement of the DPHI. It is relevant to:

- Whether the Project is considered State significant development, State significant infrastructure or a Regionally significant development, which may determine the relevant consent/approval authority for the development;
- Determining the fees payable for a development application; and
- The quantum of infrastructure contributions payable.

It is not claimed as a benefit of the Project or a benefit to Bendemeer. The Economic Assessment does not include capital expenditure in the analysis. This assessment however concluded that the construction and operation of the Project will have net positive impacts on the level of economic activity in the regional and NSW economy, including the implementation of a Community Benefit Fund (CBF).

The Applicant proposes to work in partnership with TRC, local organisations and communities so that, as far as possible, the benefits of the projected economic growth in the region are maximised and impacts minimised.

Construction Employment

There was one (1) submission that raised concerns about the number of construction employees. There were twenty-six (26) submissions that were raised supporting local construction opportunities and the implementation of the Local Employment Plan.

TABLE 4-62 PUBLIC SUBMISSIONS REGARDING CONSTRUCTION EMPLOYMENT IMPACTS

Submitter ID	Example Text from Submission
SE-61584487	"Looking at this project seems as though it would add a lot of economic value short term during the construction period which would help stimulate the economy."
SE-61579969	"The proposed solar project will create 307 jobs during construction, and 15 during the long-term operational phase, which is vital for the growth of regional economies
SE-61342965	"during the construction phase, the project will also create employment opportunities that will either benefit the locals being hired, or will bring workers into the region, which means that they will be providing further opportunities for the local community to generate income."
SE-61516220	"This will be a great financial benefit to the area creating employment both directly and indirectly."
SE-61429209	"The annual direct construction employment from the project for up to one year is inaccurate and yet another insult to the residents of Bendemeer" "Others plants have advised they install their plant in such a way there is no need for anywhere near the 260 workers claimed by this EIS."

The estimated direct construction employment for the Project is based on the best estimates of the Applicant. A Local Employment Plan (or similar) will be developed for the Project, with a 70% target of local employment adopted.

The Updated SIA (refer Appendix P of the Amendment Report) identified that the Project has the potential to provide opportunities for the local procurement of goods and services during the Construction Phase, which will benefit local and regional businesses. The Updated SIA also identified a number of enhancement measures that should be employed for the Project to increase opportunities for Bendemeer, including:

- Development and implementation of local content initiatives which include measures to encourage local procurement for the Applicant's Engineering, Procurement and Construction (EPC) Contractor;
- Creating awareness amongst the community, in partnership with TRC to foster a better understanding of the ways local businesses may be able to take part in the Project;

- Working with the EPC Contractor during the construction phase to track and report on the local content used for the Project; and
- Assist respective local businesses in becoming 'job ready' by:
 - Ensuring lead contractors are encouraged to hire regional residents where they have the required skills and experience and are able to demonstrate a cultural fit with the organisation;
 - Participation in business group meetings, events or programs in the regional community; and
 - Encouraging lead contractors to purchase local non-labour inputs to production, where local producers can be cost and quality competitive, to support local industries.

Operational Employment

There was one (1) submission that raised concerns regarding the economic impact of employment associated Project operation. There were eight (8) submissions raised supporting the operational employment opportunities from the Project.

TABLE 4-63 PUBLIC SUBMISSIONS REGARDING OPERATIONAL EMPLOYMENT IMPACTS

Submitter ID	Example Text from Submission
SE-61390713	"The project has the potential to provide local jobs during construction and particularly during operation. In a small village such as Bendemeer, 10 or 15 permanent local jobs makes a big positive impact on household budgets, the numbers of children at the school, the social fabric of the village and the small businesses in the village such as the pub, coffee shop, caravan park and petrol retailer."
SE-60947457	"once operational, the solar farm will continue to employ skilled workers and contribute to the area's long-term economic prosperity."
SE-61429209	"Bendemeer is the area that will be impacted with views ruined, property prices negatively impacted and control room type jobs advertised on SEEK for solar plants require electrical engineering and similar types of qualifications. Does the applicant expect to fill positions with Bendemeer locals? In many conversations with the Bendemeer Energy Hub it has never been disclosed exactly what jobs are on offer. Why was it never advertised that particular jobs would be on offer for suitably qualified Bendemeer locals should the project eventuate? 15-20 full time positions where the repeated claims on most solar project web sites but it must be asked why calls to up and running solar plants are so guarded and not happy to divulge their full time work force requirements. Some are fully remote controlled sending out an employee should hands on work be required. "Why was Bendemeer Energy Hub (BEH) (Athena/Metis Energy) not an exhibitor at the recent Northwest Careers Expo in Tamworth, May 2023? There were 90 exhibitors and only one solar company that unlike most other exhibitors, who provided a summary of their company in the official exhibitor handout, did not name any roles available for those seeking a career in the solar plant industry. Why are there claims of many jobs but the BEH cannot clearly state what those roles will be and did not try to engage school leavers in the industry?" "Could the applicant please name each of the 35 direct and indirect jobs that will result from this project?"

Fifteen full time jobs will be required for the Project during operation. To the extent that people who currently reside in Bendemeer have the skills to fill some of these jobs, or acquire these skills in the future, there is potential for them to be filled by existing residents. There is also potential for them to be filled by people who move into Bendemeer adding economic stimulus to the local economy.

Direct jobs from the Project will be associated with the operation and maintenance of the Project. Indirect jobs will arise from an increase in spending in the region from operation of the Project and increased spending in the region from those employed and living in the region. The economic analysis indicates that flow on jobs will mainly be in the following sectors of the regional economy:

- Retail Trade;
- Food and Beverage Services;
- Employment, Travel Agency and Other Administrative Services;
- Electricity Transmission, Distribution, On Selling and Electricity Market Operation;
- Professional, Scientific and Technical Services;
- Construction Services;
- Health Care Services; and
- Wholesale Trade.

4.2.5.13 SOCIAL

Unless specified otherwise, the references throughout this section are referring to the Social Impact Assessment (refer Appendix P of the Amendment Report).

Lifestyle and Mental Health Impacts

There were three (3) submissions in support and twelve (12) submissions in objection that were raised regarding impacts to lifestyle of the community as a result of the Project.

TABLE 4-64 SUBMISSIONS REGRADING CONCERNS FOR LIFESTYLE CHANGES

Submitter ID	Example Text from Submission
SE-61484754	"As a local, this project will provide unparalleled potential for our town (i.e., schooling, health, sporting, other services, etc.) and local job opportunities, with the potential to retain our younger population where this is not currently available for all"
SE-61342965	"Bendemeer Solar Farm is also going to provide a community benefits fund which provides the community an annual pool of money that allows them to further develop and improve their community over the life of the project, as well as providing a number of employment opportunities to local community during the operational phase"
SE-61043707	"The proposed community benefit fund will see local projects and events benefit, including assisting in clean up of local area and maintenance of McDonald River. The local economy will also have a much needed surge, with job opportunities and additional spend in Bendemeer a huge bonus to the otherwise limited streams of income."
SE-61575995	"Negative effect on property prices due to impact on views, peace & quiet to be destroyed with 24/7 noise from industrial plant"
SE-61584976	"this solar farm proposal takes away from the local community"

Submitter ID	Example Text from Submission
SE-61160970, SE-61093977, SE-60991709	"Will increase crime in our town with lots of extra people around"
SE-60910961	"Lifestyle values compromised. Decrease in land value. Unknown health risks."
SE-61578727	"Lifestyle gone for ever (depending on age of the landholder/neighbour/resident). Consider if you were an 80 year old living the lovely scenic rural village life, this will totally destroy that lifestyle;"
SE-61531962	"already there is social impact occurring causing mental health problems in the form of anxiety and depression and conflict amongst neighbours"
SE-61418223	"the stress and emotional turmoil it has created is serious, there are clubs that have had life members pushed out due to the proposed renewable energy. I am very concerned to think what mental health effect this will cause to the community if it does go ahead."
SE-61093977	"This is causing mental health issues with myself, my marriage & work performance"
SE-61065957	"This process has caused great mental stress and many sleepless nights in our family, wondering when and where we will have to move to get away from this eyesore."
SE-61188302	"Mental stress it is causing for the local residents including ourselves"
SE-61484777	"I would like to object to this project on the grounds of mental health an well-being in the community. In my experience of renewable projects, the project managers do not use any evidence based measures to identify well-being and project effects on well-being in the research stages prior to project. This project is not exempt form this. What I would like: • The project managers to engage an external mental health professional to conduct measures withing the community prior to the approval of this project. • This project must demonstrate that it will not significantly impact the well-being of community though approved measures and evidence based practices. For the project to fully consider other flow on social and mental health affects such as decrease in social connectedness, increase in anxiety and depression, as well as potential for suicide."
SE-61418237	"It is causing insurmountable distress and worries for the families that live there, especially the families next to it who will have to look at it everyday of their lives!"

Lifestyle and mental health impacts have been addressed in the Updated SIA within sections titled 'Stakeholder and Community' in both the Construction (Section 6.2.1) and Operational phases (Section 6.2.2). The Updated SIA identifies both negative and positive impacts from the Project, with identified mitigation measures included to manage the negative impacts and enhance the positive impacts.

The Applicant has undertaken regular engagement with the community so that their views could be heard and be adequately addressed through the relevant impact assessment studies (including noise and visual, as addressed in sections above). Visual and noise impacts from the Project (refer Appendix H and I of the Amendment Report) at sensitive receptors have shown to be low and unlikely to impact on the township of Bendemeer itself. These issues are also identified and addressed within the Updated SIA in Sections 6.2.1.3 'Local Disruptions'.

Property devaluation perceptions associated with lifestyle impacts have been considered in Section 6.2.2 'Land Use and Landscape'. The Applicant will continue to conduct regular engagement with the community throughout the various stages of the development to maintain trust and transparency with operations.

The key mitigation and management measures that have been developed by the Applicant to manage these concerns into the future include:

- Development of tailored construction phase and operational phase Stakeholder Engagement Plans (SEPs) to inform the community of various milestones of the project and key associated information;
- Development of a CBF with TRC to provide economic and social benefits to the community;
- Local employment targets of 70% to increase skills and employment opportunities within the Bendemeer and surrounding region; and
- Development of a workforce accommodation strategy (WAS) to manage the influx of workers to Bendemeer.

The CBF will be administered by a committee that includes TRC. The key aims of the CBF are to ensure that the Project benefits the local community through local and regional development.

Potential antisocial behaviour and crime are addressed in Section 6.2.1.4 'Increased Demand for Short and Long-term Accommodation'. An employee Code of Conduct will also be developed and implemented to reduce the impacts of itinerant workers to the local community.

Mental health and wellbeing impacts have been considered in the SIA in sections titled 'Community Cohesion' in both the Construction (Section 6.2.1.1.5) and Operational phases (Section 6.2.2.1.4). Noise impacts as they relate to mental health are addressed in Section 6.2.1. 'Local Disruptions'. Property devaluation perceptions have been considered in Section 6.2.2. 'Land Use and Landscape'.

Mental health impacts can be mitigated through the management of social cohesion (addressed in the following section), and continuous regular engagement with the community. Additionally, the Applicant will promote awareness of mental health through their website and ongoing engagement activities.

Community Division

There were thirty-eight (38) submissions that were raised relating to concerns about the Project causing division amongst the community.

TABLE 4-65 SUBMISSIONS REGARDING CONCERNS FOR COMMUNITY DIVISION

Submitter ID	Example Text from Submission
SE-61568505	"This solar project has already created great division amongst the local community, be it town residents or landowners. There is uncertainty and disharmony and where will this lead?"
SE-61575707	"The devious strategy of paying hosting landholders whilst neglecting the impact on neighbouring landholders and the community is grossly unfair and divides the community. No proper or considered effort has been made to address local concerns."

Submitter ID	Example Text from Submission
SE-61555711	"The last thing small community committees need is for members to be arguing and disagreeing about something like the Solar proposal and loose members. This has already happened. Money doesn't fix things. You can't just create a divide amongst a once very close community and throw money at the problem that you have created. We are taking about people's lives. I know of people who have been friends and neighbours for 20 plus years who are no longer speaking to one another. Is"
SE-61535092	"I am against the solar also because it is ruining our small town and making neighbours hate each other, out town is a small peaceful town where people come for peace and quiet."
SE-61539209	"If they call already dividing the community closer, then let's start with this joke."
SE-61522710	"The community is divided already with neighbours that have been friends for 30 years now hating each other"
SE-61426965	"Tightknit community that are always willing to help each other"-split town in half, neighbours not talking, businesses being avoided because of the stance they are taking, people choosing to not attend local events"
SE-61102748	"This project has broken our community spirit."
SE-61065957	"Bendemeer was an extremely tight nit community, there is quite a large division been driven in the community already because of the difference of opinions regarding the wind and solar. I being an active community member have a great deal to do with the majority of the Bendemeer residents, and the majority of the town is against these projects but are unwilling to voice their opinions due to the conflicts already starting in the community."
SE-60960724	"the division of the community that has already occurred. Bendemeer is a small rural community who thrives on working together with your neighbours not against them. Our local community events like the annual campdraft and rodeo don't need money thrown at them from overseas but more hands on deck. The division among the community has hindered these kind of events and caused divide among members."
SE-60896256	"I don't agree with the location of this project being so close to my home town. I believe it is detrimental to the social environment in Bendemeer, already breaking friendships,"
SE-60654957	"I object to the project on the basis of location, impact on neighbors, impact on surrounding land prices, use of agricultural land for such projects, lack of community consultation and negative impact on multi-generational relationships."
SE-61584957	"Causing discord amongst residents, neighbours against neighbours etc. People have lived here for generations or come to this area because of its beauty, its peacefulness and its friendly community. Developments such as this and the others that will surely following are tearing apart this close-knit community for little advantage"
SE-61429214	"It's causing altercations between neighbours and I'm concerned that the pressure might cause some one to be pushed to far and do something that is irreversible to themselves or other community members or even the Applicants of the industrial facility that is being proposed."
SE-61188304	"This has had direct impacts on a tight knit community. It has and will continue to divide the community. Small communities rely on working together and supporting each other. The community hold many events and rely on the contribution of community members. Due to this proposal community organisations have already seen adverse affects of this due to members disagreeing and leaving these organisations."

Submitter ID	Example Text from Submission
SE-61429209	"One of the key drivers of social change is this project coming to Bendemeer, the applicant/Applicant offering funding to groups to support the project at the detriment of those who stand to be negatively impacted, therefore creating division within the community. This same issue has plagued the communities of Walcha and Nundle and various other small rural communities"

Community division and associated mental health impacts have been considered in the Stakeholder and Community impact section in both the Construction and Operation Phase (Section 6.2.1 and 6.2.2.) of the Updated SIA (refer Appendix P of the Amendment Report). The community division is attributed to the presence of bias and subjectivity in relation to stakeholder opinions regarding the Project proposal. To reduce the impacts to the community during the construction and operational phases of the Project to reduce community cohesion, the following mitigation measures will be adopted by the Applicant:

- Development and implementation of a Stakeholder Engagement Plan (SEP) tailored to Construction Phase of the Project will be important to facilitate stakeholder appropriate, transparent, and meaningful engagement;
- Development and implementation of a SEP tailored to the operational phase of the Project;
- Development and implementation of a grievance mechanism to manage concerns that may arise from day-to-day construction activities;
- The Project will promote awareness of mental health through their website and ongoing engagement activities; and
- If deemed necessary during stakeholder engagement, the Project will consider alternative engagement options to reduce stakeholder fatigue.

Operational impacts to community cohesion were also considered, although it was noted that stakeholder interview conducted as part of the SIA suggested that most tension arose from construction impacts. Measures to increase the cohesion following the construction phase should be considered. Management of the equitable distribution of the CBF to prevent any perception of bias or favouritism, with regular communication about the allocation process and the tangible benefits derived from the CBF to enhance community trust.

The potential for physical violence within the community regarding reduced cohesion has been addressed in Section 6.2.1.1 and Section 6.2.2 of the Updated SIA. The Applicant will continue to engage with the community to alleviate concerns and help to rebuild community cohesion.

Housing Concerns

There were two (2) submissions – one (1) in support and one (1) in objection raised regarding concerns for the lack of available housing within the region, most specifically regarding the construction phase.

TABLE 4-66 SUBMISSIONS REGARDING CONCERNS ABOUT REGIONAL HOUSING CRISIS

Submitter ID	Example Text from Submission
SE-61574974	"The proposed Tamworth Workers Village headed up by Mark Hinman, understands that building a workers village is a new concept for the region. The village will be an essential service providing workers accommodation at a level beyond current expectations and ideals . It will completely change the notion of "traditional" workers accommodation."
SE-61588494	"Housing all these construction workers needs to be addressed. The region is already facing a housing crisis."

Housing and rental availability is addressed in Section 5.4 'Housing and Accommodation' and in Section 6.2.1.1.4 titled 'Accommodation and Worker Influx'.

A WAS will be developed for the Project, in consultation with TRC and surrounding councils (Uralla Shire Council, Walcha Council and Armidale Regional Council) to detail the measures required to manage the workforce accommodation. The WAS will consider potential housing options for workers within the area (with the prioritisation of local options where available) to help manage impacts to housing within the area. The Project will also develop a Local Employment Plan (LEP) to reduce the number of workers that will use rental or short-term accommodation.

Community Services

There were three (3) submissions that relate to concerns of the Project's potential impact on community services. Note that there were a further thirteen (13) submission that noted the positive impact of the CBF to improve the current services available within the region.

TABLE 4-67 PUBLIC SUBMISSIONS RELATING TO COMMUNITY SERVICES

Submitter ID	Example Text from Submission
SE-61582716	"I work in the health sector and the additional developments in the New England region is likely to improve health services and attract more health workers, which is critical issue for my community."
SE-61491710	"The Community fund will assist groups i.e. the pre school, school, sporting groups and community groups."
SE-61489067	"Given that Bendemeer has limited job opportunities and is generally a lower socioeconomic community so the benefits that the community fund could bring to enhance the amenities of the village and provide support to local organisations like the Preschool, River Care and sporting clubs would be significant."
SE-61488965	"The shops, pub and other community assets like hall, tennis courts, rural fire service will all get a much needed increase in people using these businesses or volunteering their time to help out."
SE-61484754	"As a local, this project will provide unparalleled potential for our town (i.e., schooling, health, sporting, other services, etc.) and local job opportunities, with the potential to retain our younger population where this is not currently available for all."
SE-61578727	"Current regional shortage of housing, doctors, nurses and all medical related personal, will the company bring in their own medical team so that we the locals do not go without?;"
SE-61584957	"No community consent for this development nor for any RE developments. No licence."

Submitter ID	Example Text from Submission
SE-61486221	"Energy Co has stated that the influx of renewables will require hundreds of labourers but has made only vague suggestions of temporary "villages". Who will provide these and the wide range of water, sewerage, medical, children's education and recreation facilitations? Will Councils once again have to pay staff to sort out the planning mistakes?"

The CBF will present the local community with opportunities to improve the quality and capacity of local services and infrastructure. Increased demand for social and emergency services is addressed in Section 6.2.1.4.1 and from a Cumulative perspective in Section 6.2.3 of the SIA. Community submissions that supported the Project emphasised the benefit of the CBF to local community groups within the Bendemeer region and provide greater opportunities for community services.

The potential increase in demand for local workers may result in road congestion, degradation and consequent delays for emergency services and increased pressure on social services infrastructure. These services will be managed through the construction phase via implementation of the TMP, SEP, as well as through continual engagement with TRC to identify and manage impacts as they arise. The Applicant will also continue to engage with the local health services to alleviate these concerns. The Updated SIA concluded that the implementation of the relevant mitigation measures would result in a low impact.

Local Employment

There were forty-nine (49) submissions that were supportive of the employment opportunities of the Project, relating in particular to the greater social impact of population growth, diversification and job diversification. Twelve (12) submissions raised concerns regarding the negative impacts that could be associated with increased employment within the region.

TABLE 4-68 SUBMISSIONS REGARDING IMPACT TO CHANGES OF LOCAL EMPLOYMENT

Submitter ID	Example Text from Submission
SE-61508460	"locally, the opportunities for employment and career development, including high skill employment, is vitally important. I have seen and continue to see growth in a diverse range of business opportunities arising from renewables development in this area, from ecologists, to electricians, security, transport, hospitality, waste management and many more - they are all prospering. A pipeline of projects being developed in the region including Bendemeer add confidence and sustainability for the region."
SE-61323457	"Projects like this will enable our business to grow and increase our employment in the local area. This will provide significant economic benefit to the local area and diversify local employment."
SE-61563719	"A major positive part of this project is the implementation of a local employment plan, as well as a community benefit fund, which will be of great benefit to the local community"
SE-60947457	"During the construction phase, it will generate a substantial number of jobs, providing employment opportunities for local contractors, engineers, and other skilled workers. The project will also boost local businesses, as materials and services will be sourced locally wherever possible. This injection of economic activity can help stimulate growth and prosperity in our community."
SE-60705971	"Furthermore, the commitment to develop and implement a Local Employment Plan and establish a Community Benefit Fund administered by a Community

Submitter ID	Example Text from Submission
	Benefit Fund Committee as part of the Voluntary Planning Agreement for the Project should also be recognised for its benefit to the local and regional community"
SE-61536958	"The community will see improved facilities and support from the project through the community fund as well as increased employment opportunities for both Bendemeer and the wider community."
SE-61482457	"What jobs are there really for the locals? When I asked the company what jobs were available I was told it would be suitable for someone like me who lives close by and won't be needed all the time – doesn't sound full time."
SE-61428462	"Half a million in capital expenditure for equipment purchased overseas as coming in through our ports further equipment and employees coming from further afield with little if any benefit to Bendemeer who will bare the brunt of this unsuitable project on high rainfall agricultural land"
SE-61426965	"They say they will employ Bendemeer residents then later say 95% will come from Armidale and Tamworth. Anyone here who wants a job is already working."
SE-61167957	"A few jobs and dollars for a few when this is made possible by ruining others' lives and destroying the views and environment of this area is reprehensible and should not proceed."
SE-61297707	"The construction jobs and ongoing operation roles will be very minimal."
SE-61486221	"During construction are usually fly/drive in teams therefore apart from some temporary local participation the local community will find itself bereft of a reliable workforce."
SE-61587711	"they will create jobs during construction and a hand full of jobs once in production, but how does a handful of jobs in the long run provide a significant benefit to the community it has effected?"
SE-61429209	"What exactly are the employment opportunities for the local workforce who by the way are already employed? Please name the roles, skills and hours required for each role – if everything else in this project has been described to the last degree, why can the Applicant never describe the actual employment on offer?"
SE-61426965	"The local pub will only benefit if there are FIFO workers. Host owner lives away from here and doesn't add to the villages economy. They will take workers away from businesses in Tamworth and Armidale as unemployment rate has dropped. This will make it hard for local businesses to fill jobs."

Maximising local employment through both the construction and operation phases is a key priority, demonstrated through Section 6.3 'Summary of Impact Assessment and Associated Mitigations' of the SIA. These mitigations include the development and implementation of the LEP and targets in Table 7-1 of the SIA 'Proposed Monitoring Framework'. Employment and procurement are discussed in the SIA with approximately 70% of employees sourced from the region. Public submissions highlighted the perceived support for increased employment and revenue opportunities for local workers.

The Project will have significant opportunities to enhance the employment and procurement opportunities within the Bendemeer region. Increased demand for labour through large-scale projects not only creates direct employment opportunities but has spill-over effects generating indirect employment in the local community and wider Social Locality within which they occur. The indirect employment opportunities are discussed within **Section 4.2.5.12**. Enhancement measures of these opportunities include increasing local awareness of job opportunities, working the lead construction contractor to meet local employment targets.

The potential for skills shortages to be created as a result of the Project was also identified during the stakeholder consultation process. Through adequate mitigation, the Updated SIA determined that there was a low impact significance.

Modern Slavery

Eight (8) submissions raised concerns about unethically sourced solar panels and the use of slavery to produce these materials.

TABLE 4-69 PUBLIC CONCERN REGARDING SUPPLY CHAIN IMPACTS

Submitter ID	Example Text from Submission
SE-61586707	"Source of Panels. Who will give a written guarantee that the panels are not manufactured by slave Labour."
SE-61428462	"Is the overseas mining and manufacturing used in the production of the items to be shipped in for this project using child or forced labour? Were the practices of the manufacturers as environmentally responsible as those used in Australia?"
SE-61091464	"That China becomes one of the net benefactors from the manufacturing of these panels and that they are not aligned with our values and more to the point are fast becoming our foe"
SE-61438482	"Where is evidence of an assurance that the project will comply with conditions of the <i>Modern Slavery Act 2018</i> ? Imported components are subject to this Act."

As stated in Section 1.2 of the EIS, Metis have committed to integrating internationally recognised environmental, social and governance (ESG) standards into their business practices, including procurement. The *Modern Slavery Act 2018* requires that all entities that operate in Australia that have an annual consolidated revenue greater than \$100 million must report annually on the risk of modern slavery within their supply chains and measures they propose to mitigate these.

It is also noted that the Clean Energy Council are also committed to addressing and mitigating modern slavery across the supply chains of renewable energy projects in Australia. While not a member, Metis is committed to maintaining this standard for their operations within Australia.

4.2.5.14 CUMULATIVE IMPACTS

There were eight (8) submissions that expressed concerns relating to cumulative impacts from the Project. Note that cumulative impacts specific to the sections above have been addressed within those sections.

TABLE 4-70 SUBMISSIONS RAISED IN OBJECTION TO CUMULATIVE IMPACTS

Submitter ID	Example Text from Submission
SE-61439218	"There is inadequate identification of the true cumulative impact."
SE-61578727	"Existing shortage and cost will naturally increase by supply and demand of gravel, water, sand and cement for construction, leaving local residents with no materials available and exorbitant increase. that is if they can obtain such materials;"
SE-61575995	"Cumulative impact - Bendemeer straddles the New England Highway and at the junction of the Oxley Highway therefore all NE projects will travel through Bendemeer"
SE-61586707	"Cumulative Impact— New England has been allocated 8 GW which I understand equates to 10,000 ha of Solar and 1500 wind towers. The majority is proposed for Southern New England This project must be considered in conjunction with Bendemeer Wind Thunderbolt Wind Ruby Hills Wind Balala Wind Yarrowyck Wind Boorolong Wind Salisbury Solar Salisbury Wind Winterbourne Wind Hills of Gold Wind Transmission Lines Plus Other NE Rez projects"
SE-61428462	"The CUMULATIVE IMPACTS of all the project for us wind, solar, powerlines and all those surround our area and all having to travel through Bendemeer is unbelievably unfair and irresponsible - we may be few in number but that doesn't mean we matter less"
SE-61426965	"They only counted the Bendemeer solar and wind and Thunderbolt Wind. Conveniently forgot Winterbourne Wind and Ruby Hills Wind and all construction north of Bendemeer. Our highway will be clogged up with non stop trucks and mega trucks holding up people going to work, appointments and emergency vehicles. They say 120 per day X 6 days a week with 1 year of construction -37,440. Add to this Winterbourne and Ruby Hills -724,179. That is over three quarters of a million vehicles going past Bendemeer in one year. That is only taking into account three construction sites."
SE-61584957	"Cumulative impact has not been adequately evaluated and addressed. This adds another RE project to the already numerous and large RE rollout that has been forced onto the NE Region, its inhabitants and its environment."
SE-61575995	"I object to this project going ahead due to culminative impact, too many in too short a space."

The cumulative impacts of the Project were assessed in accordance with the 'Cumulative Impact Assessment Guideline for State Significant Projects' (DPIE, 2022b). Cumulative impacts that were considered as part of the EIS include aspects such as biodiversity, traffic, heritage, water, bushfire, air quality and waste (refer Section 6.16 of the EIS). Potential cumulative impacts based on the proposed amendments were considered with a renewed list of other SSDs within the vicinity of the Project. Refer to Section 6.13 of the Amendment Report for the complete list of nearby SSDs.

Construction of the amended Project is expected to be delayed by 24 months and proposed to commence in Q2 of 2026. Some potential overlap of construction periods with other SSDs in the region will occur; however, the distance between these sites and existing capacity of the road network and regional services are not expected to result in more than minimal impacts.

The following additional relevant future projects have been made public since Project EIS exhibition:

- New England REZ Transmission Project;
- Lambruk Solar Farm;
- Deeargee Solar Farm;
- Tilbuster 2 Solar Farm;
- Hillview Solar Farm;
- Hillview Wind Farm;
- Nottingham Park Solar Farm;
- Kingswood BESS;
- Gara BESS;
- Armidale East BESS; and
- Eastern Hub Firming Battery.

Due to the staging of these Projects, it is considered unlikely that these Projects will result in any direct cumulative impact on the amended Project.

In addition, Salisbury Solar Farm and Doughboy Wind Farm have since been withdrawn, and there is no publicly available information for Salisbury Wind Farm. There is no publicly available information relevant to cumulative impacts for Salisbury Wind Farm, Ruby Hills Wind Farm, Yarrowyck Wind Farm, Boorolong Wind Farm nor Rangoon Wind Farm for inclusion in the cumulative impact assessment during the preparation of the EIS, Amendment Report nor this Submissions Report. The New England REZ Transmission Project has progressed and is currently at 'Prepare EIS' stage.

The Updated TIA (refer Appendix L of the Amendment Report) considered the cumulative traffic impacts from nearby SSDs with the potential to increase traffic in conjunction with the expected increase as a result of the proposed amendments. Additional peak traffic from the nearest SSD with construction period overlap (Thunderbolt Wind Farm) was modelled with peak traffic movements of the Project at the New England Highway / Oxley Highway intersection and concluded that it is not expected to strain the local road network. Other SSDs did not have traffic data available for such modelling but similarly concluded that minimal impact is expected considering the greater distance and existing capacity of the road network.

The SIA (refer Appendix P of the Amendment Report) also considers the potential cumulative impacts of the Project, relating to increased traffic, a change in the rural character of the New England Tableland and the increased demand of workers and the subsequent impacts on short term and long-term accommodation within the region. The SIA also noted the potential benefit of the Project regarding demand for local materials, workforce and accommodation which expects to facilitate commercial inflow to the region.

5. PROJECT JUSTIFICATION AND EVALUATION

This section includes a summary of the justification and evaluation of the amended Project. It incorporates any relevant issues raised in submissions and the Applicant's response to these issues. A detailed justification and evaluation to the amended Project is provided in Section 7 of the Bendemeer Solar Farm Amendment Report.

5.1 PROJECT JUSTIFICATION

Australia and the world are in the process of transitioning from traditional fossil fuel energy generation to clean and renewable energy. Solar energy and onshore wind remain the lowest cost of source of new build electricity generation in Australia. The draft 2022-23 GenCost report from CSIRO finds that compared to 2021-22 data, technology costs have increased 20% on average for 2022-23, but with significant diversity across different technologies. Costs increases are as low as 9% for solar farms and from 22% for coal (CSIRO, 2022). The Project together with other renewable energy projects will help to drive down the cost of wholesale electricity.

The Project remains consistent with the Ecologically Sustainable Development (ESD) principles described in the EIS, it is in the public interest and provides public benefits. The Project is justified as:

- The Project is critical in respect to the national and global response to combatting anthropogenic climate change. It will contribute positively to the energy sector wide transition from traditional fossil fuel energy generation to wholesale renewable energy generation. The Project would generate enough clean, renewable energy for about 74,000 average NSW homes, displacing approximately 420,000 t CO₂^{-e} pa generated by non-renewable sources. In doing so the Project will contribute to NSW and Commonwealth Government target of net-zero emissions by 2050;
- The Project will supply 577,000 MWh per year of clean, renewable, low-cost energy to the national grid, offsetting the generation that will be lost with the closure of coal-fired power stations. These include 1,260 MW Liddell Power Station (closed in 2023), the 2,922 MW Eraring Power Station (scheduled to close in 2027), the 1,320 MW Vales Point Power Station (scheduled to close in 2029), the 2,640 MW Bayswater Power Station (scheduled to close between 2030 and 2033); and the 1,400 MW Mount Piper Power Station (scheduled to close in 2040);
- The Project is strategically located New England REZ (**Figure 1-1**), which aligns with the strategic objectives of the New England REZ, and the Australian Government and NSW climate change commitments and other strategies, policies, and plans across regional and local contexts;
- The Project Area was selected due to the available solar resource, favourable topography, land predominantly cleared and currently used for agricultural activities (grazing), proximity to existing 330 kV line for grid connection, suitable distance and limited viewpoints from the main Bendemeer village, and site accessibility and ownership;

- The Project layout has been through iterative design and environmental, economic and social assessments process to maximise the use of existing disturbed areas and ensure impacts have been avoided and minimised as much as possible. The amendments to the Project were undertaken in consideration of public and agencies submissions to the EIS and in consultation with landowners, the community, aboriginal parties, local council and government agencies;
- The Project will provide ongoing economic benefits to the NSW, local economy in Tamworth Regional LGA and more broadly the regional economy within the LGAs of Armidale Regional, Uralla Shire and Walcha. The Project will generate opportunities for local contractors and businesses to supply services during construction and operation. Training and development will be offered to upskill the regional workforce to support the growing renewable energy industry, as required. The Project is anticipated to generate up to:
 - Up to 307 FTE jobs during peak construction and 250 FTE for the peak 12-month, in turn creating per year of construction approximately \$279 million (M) in direct and indirect output, \$121M in direct and indirect value added and \$76M in direct and indirect household income and 846 direct and indirect jobs to the NSW economy;
 - 15 FTE jobs during operations, in turn creating per year of construction approximately \$44M in direct and indirect output, \$27M in direct and indirect value added and \$7M in direct and indirect household income and 71 direct and indirect jobs to the NSW economy;
 - The Project will further provide a diversified income stream for rural landholders and neighbours through payments to host landholders and the Community Benefit Fund. The income provided to landowners hosting project infrastructure can help make farms more resilient to the impacts of droughts, fires and commodity price fluctuations; and
 - The Applicant will establish a CBF to provide economic support to local non-profit organisations, community programs/events, local businesses, training, and services/infrastructure for the benefit of the residents and the broader community in Tamworth Regional LGA.
- The Project will not result in significant environmental, social or economic impacts, and the EIS, this submissions report and the Bendemeer Solar Farm Amendment Report have concluded that any residual impacts can be appropriately managed and/or offset in accordance with relevant policies.

The option of not proceeding with the Project needs consideration as it represents the status quo, avoids development impacts but does not realise the Projects benefits, including contributions to the generation of renewable energy and increased energy security. Due to the need to establish renewable energy generation and storage projects in NSW, not proceeding with the Project in its current location may encourage development in a less favourable location, resulting in undesired outcomes, such as greater requirements for grid connection infrastructure and larger environmental and social impacts.

5.2 PROJECT EVALUATION

In response to submissions received on the EIS and in consideration of the outcomes of engagement with the community, landholders and government agencies, amendments have been made to the Project since the public exhibition of the EIS.

The Applicant has undertaken additional civil design work that allowed reduction of Project elements in key areas while maintaining the Project's feasibility. These changes to the layout required updated to the environmental, economic and social technical assessments, and the mitigation and measures commitments. It demonstrates the Applicant's desire to develop a Project that responds to values and concerns raised by the community, neighbouring and host landholders, Aboriginal parties, local council and government agencies.

Additionally, these refinements have considered the cumulative impacts of the amended Project in combination with other past, present and reasonably foreseeable future SSDs. Potential cumulative impacts to aspects including biodiversity, heritage, flooding, traffic, preliminary hazards, bushfire, economic, and social are presented in full in the appendices to the Bendemeer Solar Farm Amendment Report. The potential for cumulative impacts to air quality, and waste have not been undertaken as it is considered that these potential impacts are primarily confined to the Project Area and are negligible in a broader context.

Table 5-1 provides a summary of the updated evaluation of the amendments proposed for the Project as assessed in detail in the Bendemeer Solar Farm Amendment Report.

TABLE 5-1 SUMMARY OF UPDATED EVALUATION OF THE AMENDED PROJECT

Aspect	Outcomes of Assessments
Biodiversity	The proposed amendments will not impact on any biodiversity values outside the previous Disturbance Footprint. The reduced Disturbance Footprint has resulted in reduced native vegetation clearing; all of which correspond to Box Gum Woodland TEC which is both BC Act and EPBC Act listed as well as SAII and potential habitat for threatened species. This has resulted in an effective clearance area of 55.3 ha of Box Gum Woodland TEC which is a 47% reduction from that assessed in the EIS and retains a native vegetation corridor within the amended Project Area. Additionally, potential impacts to several candidate threatened species associated with the removal of Box Gum Woodland TEC were relegated to negligible impacts as a result of the reduced clearance of higher-quality habitat; 76% of this habitat within the Project Area will be retained as a direct result of the proposed amendments. This resulted in the removal of Tusked Frog and Eastern Pygmy-possum from the candidate species list through further survey effort and habitat review.
Aboriginal Cultural Heritage	The proposed amendments to the Project layout will not impact on any identified Aboriginal sites, artefacts or PADs. The amended Disturbance Footprint will also avoid PAD 1 and PAD 2 identified in the EIS within the Project Area. Additional surveys undertaken at the external road work area along Oxley Highway did not identify any Aboriginal sites, artefacts nor PADs. An ACHMP will be prepared prior to the commencement of construction and include an unexpected finds procedure.
Historic Heritage	One historic heritage item (Riverside-HS01) recorded within the Project Area was assessed as having no heritage significance under the current Heritage NSW guidelines and the Burra Charter (refer Appendix G of the Amendment Report). The listed item Bendemeer Station is located 760 m from the Project. The item will not be directly or indirectly impacted by the amended Project due to distance, topographic and natural visual barriers present between the Project Area and Bendemeer Station.

Aspect	Outcomes of Assessments
Noise	Construction noise exceedances for the amended Project remains similar to that assessed in the EIS. Under a worst-case construction noise scenario, exceedances were identified at 32 sensitive receivers within 1,500 m of the Project boundary. The exceedance can be managed with reasonable and feasible measures, as will be described in the CNMP for the amended Project. During operations, all identified Sensitive Receivers are expected to achieve compliance with the NPI PTNLs except for Sensitive Receiver 29, which is an associated dwelling. Mitigation and management measures have been updated and incorporated into the amended Project design to enable NPI PTNL compliance to be achieved at all other sensitive receivers. Traffic noise levels as a result of the construction works are not expected to adversely affect any receiver. Further, the cumulative noise impact of the Project and nearby SSDs at the nearest Sensitive Receivers to the Project remains negligible for the amended Project.
Visual	The proposed amendments to the Project layout will not result in additional visual impacts on private or public viewpoints. One (1) non-associated dwelling was identified as requiring a detailed assessment as a result of the 'moderate' rating within the preliminary assessment (R123). Although not required according to the 'Technical Supplement - Landscape and Visual Impact Assessment' (DPE, 2022), an additional 3 detailed dwelling assessment were selected to demonstrate the low impacts. All 4 non-associated dwellings were reassessed using the amended Project layout, which returned a low visual impact rating. The visual impact rating has not changed with the amendments; however, the photomontages indicate that the degree of visibility (cell counts) will be reduced at three (3) non-associated dwellings (R113, R27, R123) (refer Appendix I of the Amendment Report). Through optimisation of the PV tracker range, no glint and glare impacts are likely. Notwithstanding the above, the Applicant will implement a landscape plan to further reduce visibility of the Project, particularly residences from the southwest, northeast and northwest of the Project.
Soils and Agriculture	Agricultural activities will be maintained within the amended Project Area (as much as possible) for the duration of the construction and operational phases of the Project. The impact of the Project on productivity of agricultural land remains minimal, temporary, and limited to the Project Area: • 606.9 ha will be unavailable during one-year peak of construction works, generating a temporary removal of potential agricultural primary productivity of up to \$250,067. • 18.5 ha will be unavailable during operations, associated with BESS, substation and associated infrastructure, and the remaining 588.4 ha having a 20% reduction in the livestock stocking rate. Temporary removal of potential agricultural primary productivity will be of up to \$47,043 per year of operation. Overall, by adopting the principles of impact avoidance and minimisation during construction and operation of the Project and implementing effective decommissioning and rehabilitation at the end of the Project life, the Project will have no permanent negative impacts on agricultural resources or enterprises.
Water Resources, Hydrology and Flooding	Within and outside the amended Project, proposed amendments to the layout resulted in no more than minor increases in flood depths (typically less than 0.10 m) and velocities (typically less than 0.50 m/s) for the 5% and 1% AEP events. For the 1% AEP event, flood depths on Oxley Highway were modelled to be up to 15 mm deeper than that previously assessed for the superseded Project Area. However, given that Oxley Highway is not trafficable under the existing scenario, this increase was found to be marginal and not considered to be a significant impact.

Aspect	Outcomes of Assessments
Traffic	OSOM vehicles will transport the transformer (largest component) from Port of Melbourne and other larger elements (e.g., modular buildings) from Port of Newcastle and Port of Brisbane. Route assessments undertaken from these ports to the Project indicate that the access routes can accommodate the OSOM vehicles required for the Project. Additionally, a swept path undertaken for the largest OSOM vehicle indicates no civil works will be required and the largest OSOM vehicle can access the Project Area with suitable traffic management measures. Therefore, no impact from the amended Project on the road network is expected. The site access will be provided with a BAR treatment and with adequate sight distance to allow vehicles to safely enter and exit the road network. No BAL treatment will be required given no OSOM or heavy vehicles will travel along Oxley Highway east of the Project, or travel between Yarrowitch and Wauchope. Further, the cumulative impact of the Project and nearby SSDs on road traffic is expected to be minimal. A TMP will be prepared to mitigate the impacts of site traffic generated along the proposed transport route.
Hazards and Risks	The qualitative review of the potential incidents of the amended Project indicates that offsite impacts would not be expected to occur. Hence it is concluded that the risks at the Project boundary are not considered to exceed the acceptable risk criteria. Further, LFP was chosen for the BESS technology, which presents lower thermal runaway than the NMC technology also proposed in the EIS. The amended Project provides sufficient space within the BESS area to avoid fire propagation, and required spacings and offsets will be adopted.
Air Quality	No changes to air quality or waste impacts as a result of the amendments to the Project are expected. Overall, the amended Project will provide benefit impacts as it will improve air quality through the displacement of emissions that would otherwise be generated through the burning of fossil fuels used to generate electricity from traditional coal fired power stations.
Waste	A WMP will be prepared for the Project and will describe the measures to be implemented to manage, reuse, recycle and safely dispose of waste during construction and operation. A DRP will be prepared for the Project incorporate measures within the WMP during the decommissioning phase.
Economic	Due to reduction of the average construction workforce by 10 FTE during the 12-month peak construction, there will be a small reduction in the average construction impacts of the Project on the regional and NSW economy. Overall, the construction of the Project will create demand for regional labour resources and regional inputs to production. However, this is not expected to lead to any observable impacts on regional wages or prices. The operation of the amended Project will create a small demand for regional labour resources and regional inputs to production. Consistent to that assessed in the EIS, no wage or price increases or production shortages are anticipated. The residual impacts of the Project on adjoining land values, after implementation of management and mitigation measures are predicted to be minimal.
Social	Submissions received during EIS exhibition resulted in some elevated impact ratings during all Project phases, primarily related to reduced community cohesion and local disruptions (traffic, accommodation and services) and as a result of the Project. Potential impacts during decommissioning were assessed and is expected to create a small demand for regional labour, while local disruptions during this phase would mirror that of the construction phase. While the proposed amendments describe an overall reduction of Disturbance Footprint and is not expected to result in additional direct environmental impacts, the potential social impact to the locality requires a combination of ongoing management and mitigation measures to account for the elevated impact ratings. This essentially relies on the synergy between the local community, organisations (e.g. Tamworth Regional Council) and the Applicant in the form of established consultation channels to achieve collectively positive outcomes for all parties.

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APPENDIX A SUBMISSION REGISTER

Submission ID	Position	Location	The Project	Procedural matters	Justification and Evaluation	Unscoped / N/A	Biodiversity	Aboriginal Cultural Heritage	Historic Heritage	Noise	Landscape and Visual	Soils and Agriculture	Water Resources, Hydrology and Flooding	Traffic	Preliminary Hazard Analysis	Bushfire	Economic	Air Quality	Waste Management	Social	Health	Cumulative Impact
Community Organisations																						
SE-61584959	Support	Armidale, New South Wales																				
SE-61574974	Support	Tamworth, New South Wales																				
SE-61534756	Support	Moonbi, New South Wales																				
SE-61536737	Support	Bendemeer, New South Wales																				
SE-61451958	Support	Boggabri, New South Wales																				
SE-61414457	Support	East Tamworth, New South Wales																				
SE-61331457	Support	Tamworth, New South Wales																				
SE-61323457	Support	Tamworth, New South Wales																				
SE-61153457	Support	Uralla, New South Wales																				
SE-61584959	Support	Armidale, New South Wales																				
SE-61574974	Support	Tamworth, New South Wales																				
SE-61575995	Object	Salisbury Plains, New South Wales																				
SE-61482459	Object	Yarrowyck, New South Wales																				
SE-61439218	Object	Ben Lomond, New South Wales																				
SE-61429209	Object	Bendemeer, New South Wales																				
Public Submissions																						
SE-61588486	Support	Gunnedah, New South Wales																				
SE-61588256	Support	Moonbi, New South Wales																				
SE-61588239	Support	Hillvue, New South Wales																				
SE-61584487	Support	North Tamworth, New South Wales																				
SE-61587210	Support	North Tamworth, New South Wales																				
SE-61584479	Support	Bolwarra Heights, New South Wales																				
SE-61587207	Support	North Tamworth, New South Wales																				
SE-61586959	Support	East Tamworth, New South Wales																				
SE-61580247	Support	Maroubra, New South Wales																				
SE-61582716	Support	Armidale, New South Wales																				
SE-61579969	Support	Forester, New South Wales																				
SE-61572957	Support	Roseville, New South Wales																				
SE-61565247	Support	Surry Hills, New South Wales																				
SE-61566457	Support	Mereweather, New South Wales																				
SE-61563719	Support	Bridgeman Downs, Queensland																				
SE-61565226	Support	Thorneside, Queensland																				
SE-61564957	Support	Frenches Forest, New South Wales																				
SE-61551974	Support	Kingswood, New South Wales																				
SE-61551970	Support	Armidale, New South Wales																				
SE-61553472	Support	Acacia Ridge, Queensland																				
SE-61552957	Support	Darawank, New South Wales																				
SE-61551209	Support	Bendemeer, New South Wales																				
SE-61548736	Support	Armidale, New South Wales																				
SE-61549715	Support	Bendemeer, New South Wales																				

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Submission ID	Position	Location	The Project	Procedural matters	Justification and Evaluation	Unscoped / N/A	Biodiversity	Aboriginal Cultural Heritage	Historic Heritage	Noise	Landscape and Visual	Soils and Agriculture	Water Resources, Hydrology and Flooding	Traffic	Preliminary Hazard Analysis	Bushfire	Economic	Air Quality	Waste Management	Social	Health	Cumulative Impact
SE-61588494	Object	Bendemeer, New South Wales																				
SE-61588492	Object	Bendemeer, New South Wales																				
SE-61584976	Object	Bendemeer, New South Wales																				
SE-61568505	Object	Bendemeer, New South Wales																				
SE-61575707	Object	Bendemeer, New South Wales																				
SE-61555711	Object	Bendemeer, New South Wales																				
SE-61535092	Object	Bendemeer, New South Wales																				
SE-61539209	Object	Bendemeer, New South Wales																				
SE-61529238	Object	Bendemeer, New South Wales																				
SE-61531962	Object	Bendemeer, New South Wales																				
SE-61522710	Object	Bendemeer, New South Wales																				
SE-61508221	Object	Bendemeer, New South Wales																				
SE-61487995	Object	Bendemeer, New South Wales																				
SE-61488279	Object	Bendemeer, New South Wales																				
SE-61482457	Object	Bendemeer, New South Wales																				
SE-61454959	Object	Bendemeer, New South Wales																				
SE-61418223	Object	Bendemeer, New South Wales																				
SE-61428462	Object	Bendemeer, New South Wales																				
SE-61426965	Object	Bendemeer, New South Wales																				
SE-61420238	Object	Bendemeer, New South Wales																				
SE-61396221	Object	Bendemeer, New South Wales																				
SE-61341966	Object	Bendemeer, New South Wales																				
SE-61343213	Object	Bendemeer, New South Wales																				
SE-61244229	Object	Bendemeer, New South Wales																				
SE-61236264	Object	Bendemeer, New South Wales																				
SE-61221710	Object	Bendemeer, New South Wales																				
SE-61208213	Object	Bendemeer, New South Wales																				
SE-61188302	Object	Bendemeer, New South Wales																				
SE-61195461	Object	Bendemeer, New South Wales																				
SE-61188284	Object	Bendemeer, New South Wales																				
SE-61169004	Object	Bendemeer, New South Wales																				
SE-61188236	Object	Bendemeer, New South Wales																				
SE-61188501	Object	Bendemeer, New South Wales																				
SE-61188498	Object	Bendemeer, New South Wales																				
SE-61169002	Object	Bendemeer, New South Wales																				
SE-61195251	Object	Bendemeer, New South Wales																				
SE-61168989	Object	Bendemeer, New South Wales																				
SE-61161015	Object	Bendemeer, New South Wales																				
SE-61160970	Object	Bendemeer, New South Wales																				
SE-61150458	Object	Bendemeer, New South Wales																				
SE-61102748	Object	Bendemeer, New South Wales																				

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