

Response to Submissions Report

Daroobalgie Solar Farm

21 November 2022

Table of Contents

1.	I	ntroduction	3
	1.1	Background	3
	1.2	Purpose of Report	3
2.	5	Submissions	3
	2.1	Exhibition details	3
	2.2	Submissions received	3
3.	A	Actions taken after EIS Exhibition	4
	3.1	Project refinement	4
	3.2	Consultation	4
	3.3	Updated technical assessments	5
4.	F	Response to Submissions	6
		Community Submissions	
	4.2	NSW Department Submissions	9
	4.3	Other Submissions	27
5.	Į	Jpdated Environmental Management Measures	29
6.	(Conclusions	32

Appendices

Appendix A	Traffic Impact Assessment
Appendix B	Biodiversity Development Assessment Report
Appendix C	Aboriginal Cultural Heritage Assessment
Appendix D	Preliminary Hazard Analysis Report
Appendix E	Landscape Mitigation Memo
Appendix F	Road/Intersection Upgrade Memo
Appendix G	Community Benefit Sharing Guidelines
Appendix H	Updated EIS Figures

1. Introduction

1.1 Background

Pacific Hydro Australia Developments Pty Ltd (Pacific Hydro) is applying for development approval for the proposed Daroobalgie Solar Farm Project (the Project), located within the Forbes Shire Council local government area (LGA) in the Central West region of New South Wales (NSW).

The Project is proposed to comprise the installation of approximately 420,000 solar PV panels, and associated infrastructure including substation, battery energy storage system (BESS), inverters, underground cabling, site offices, car parking, new access tracks, an electricity transmission line (ETL) and switchyard to connect the solar farm to existing TransGrid infrastructure. The Project has a capacity of approximately 100 megawatts (MW AC) and is estimated to provide enough electricity to power up to the equivalent of 34,000 homes each year.

The Project seeks to generate electricity from renewable solar energy and connect into the National Electricity Market (NEM), assisting with greenhouse gas reduction targets in NSW and Australia.

1.2 Purpose of Report

This Response to Submissions (RTS) Report responds to the submissions received following public exhibition of the Environmental Impact Statement.

2. Submissions

2.1 Exhibition details

The Daroobalgie Solar Farm EIS was publicly exhibited from Monday 21 March 2022 to Tuesday 19 April 2022. During this time the EIS was available electronically for review on DPEs Major Project's website.

2.2 Submissions received

During the exhibition period at total of 18 submissions were received as detailed in Table 2.1. None of the submissions received were objections to the Project. All submissions requested further information or clarification of Project information.

Table 2.1 Summary of submissions received

Group	Agency	Submission Type	Topic
Community	Community #1	Comment	Australian made solar panels
	Community #2	Comment	Health and safety, bushfire, visual impacts
NSW	Aboriginal Heritage NSW	Comment	Aboriginal cultural heritage
Agency	Biodiversity Conservation and Science (BCS) Directorate	Comment	Flora and fauna
	Department Planning and Environment (DPE)	Comment	Hazard and risk, roads, subdivision, VPA, connection, landscaping, figure updates
	DPE Crown Land	Comment	Land tenure
	DPE Water	Comment	Water use
	DPI Agriculture	Comment	Land use
	Forbes Shire Council	Comment	Worker accommodation, waste, traffic and roads, VPA
	Geological Survey of NSW – Mining, Exploration and Geoscience	Comment	Land tenure
	Heritage Council NSW	Comment	Heritage
	NSW Fire and Rescue Submission	Comment	Bushfire, emergency management

Group	Agency	Submission Type	Topic
	NSW Rural Fire Service Submission	Comment	Bushfire, emergency management
	Parkes Council	Comment	Worker accommodation, traffic and roads
	TfNSW	Comment	Traffic and roads
Other	Australian Pipeline Association (APA) Group	Comment	ETL
	Australian Rail Track Corporation (ARTC)	Comment	ETL
	TransGrid	Comment	Connection

3. Actions taken after EIS Exhibition

3.1 Project refinement

This RTS report and amendments made to technical reports focus on providing further information or clarification about potential impacts and mitigation measures identified in the EIS. The only project refinement made in response to submissions was expanding the project footprint to include road upgrade works along Troubalgie Road, which provides access to the solar farm site. A full description and impact assessment of this project refinement is set out in the Daroobalgie Solar Farm Amendment Report (November, 2022)

Due to concerns that Forest Road (and the Forest Road/Newell Hwy intersection) is unsafe for construction related vehicles, this road will be prohibited for use by Project traffic. The only heavy vehicle traffic that will be permitted to access Forest Road during construction will be the small number of vehicles required for construction of the ETL. These vehicles will not be allowed to access or exit Forest Road via the Newell Hwy/Forest Road intersection. The Traffic Impact Assessment (Appendix A) has been revised to reflect this change.

3.2 Consultation

Pacific Hydro has undertaken the following consultation during the Response to Submissions phase of the Project.

3.2.1 Community

A discussion was held between Pacific Hydro and an individual with concerns about the Project on 2nd August 2022. The EIS and Preliminary Hazard and Risk Assessment was provided to the individual for review.

3.2.2 Transport for NSW

A meeting was held on 1st June 2022 to discuss TfNSW comments on the EIS and agree the approach to addressing the concerns or information gaps identified.

3.2.3 Forbes Shire Council

A meeting was held on Wednesday 22nd June 2022 with Forbes Shire Council, Pacific Hydro and SMEC to discuss the scope of road and intersection upgrades associated with the Project. Concept drawings were developed on this basis and provided to FSC via email on 14th July 2022. Following further advice from FSC on 4th August 2022 the concept drawings were adapted to meet their local road upgrade standard of 2 x 3.25m lanes with a 1m sealed shoulder.

A meeting was held on 15th June between FSC and Pacific Hydro to discuss the terms of the Voluntary Planning Agreement (VPA). Several follow up conversations & emails have taken place since this meeting in an attempt to reach agreement on the final terms of the agreement.

3.2.4 BCS

Consultation between GHD and Erica Baigent from BCS has been undertaken to address BCS comments on the Daroobalgie BDAR. Consultation has included:

- Phonecall 17/5/22
- Email 6/7/22
- Email 19/7/22
- Phonecall 21/7/22

3.3 Updated technical assessments

There has been a number of updates to the technical assessments to address the submissions received. These have included:

- Traffic Impact Assessment (Appendix A)
- Biodiversity Development Assessment Report (BDAR) (Appendix B)
- Cultural Heritage (Appendix C)
- Preliminary Hazard and Risk Assessment (Appendix D)

In addition, two new additional technical memos/letters are provided with this RTS report:

- Landscape mitigation memo (Appendix E)
- Road/Intersection upgrade memo (Appendix F)

4. Response to Submissions

4.1 Community Submissions

Issue	Detail of Issue/Recommendation	Response			
Submission #1	Submission #1 – Greenacre Resident				
Solar Panels	Requests Australian made solar panels	There is currently one solar panel manufacturer in Australia (Tindo Solar) that manufactures utility-scale panels in commercial quantities. A competitive tender for the supply and installation of solar panels will be conducted by Pacific Hydro post financial close of the Project. Many criteria are considered during the tender process including a supplier assessment of health and safety standards, labour relations and employee contracts.			
Submission #2	 Forbes Resident (Forest Road) 				
	Raises concerns regarding back boundary being 250 m from the residence with indoor and outdoor entertaining area having direct viewpoint. HV transmission lines will lower property values substantially.	Pacific Hydro engaged with the Forest Road resident on the 2 nd and 3 rd August 2022 and provided further information around bushfire/EMF risks and traffic management measures.			
Property Values		To address potential visual impacts from the ETL, Pacific Hydro has agreed to provide some landscaping along the boundary of their property to help screen the transmission line poles from their entertaining area. A landscape plan will be developed post detailed design when the exact location of the transmission line poles has been determined.			
	 Raises concern regarding bushfire risk and that RFS are unable to attend property due to proximity of HV transmission lines. How far from the boundary will the HV transmission lines be constructed? 	The ETL centreline is proposed to be located approximately 35 metres from the property boundary. The property is not located within a classified Bushfire Prone Area. A bushfire on the residential property will be able to be attended to due to the distance between the transmission line and the property boundary.			
Electricity Transmission	 Raises concern regarding electrical arcs/flashovers with the residents steel boundary fencing and the 	 A minimum horizontal clearance distance from the Single Pole 132 kV power line is 15 metres. A fence of 2m or below will not be deemed a risk. 			
Lines (ETL)	stock that habit those paddocks.	Pacific Hydro will follow industry standard and directly work with the asset			
	 Raises concern regarding underground pipes that run from the Lachlan River through property to Brinecure which are not far from the ground surface and made of steel. 	(underground pipes) owner to ensure that safe distances to prevent energisation will be managed. The details of the inspection and maintenance activities required along the ETL during the lifespan of the Project will be detailed within the Bushfire Management Plan (BMP). Vegetation will also be cleared along the ETL in accordance with TransGrid easement guidelines.			

Issue	Detail of Issue/Recommendation	Response
	 Requests a copy of a Bushfire Management Plan, particularly proposed management measures during bushfires. 	 A Bushfire Management Plan will be prepared post approval of the Project. The Bushfire Management Plan will outline the bushfire prevention, management of fuels on site, storage and maintenance of fire fighting equipment, adequate water supplies.
	 Raises concern on Electro and Magnetic Fields (EMF) and impact of resident's health due to proximity of HV Transmission Lines 	 Pacific Hydro will be adhering to the Australian Radiation Protection and Nuclear Safety Agency ICNIRP guidelines which outlines the limits for the general public's exposure to EMF. The indicated EMF at the edge of the ETL (assessed at 35 metres) is 2 – 50 mG,
	 Please provide indicative pictures of the number of lines, type and size of towers of the particularly mentioned transmission lines. 	which is significantly lower than the levels contained within the guidelines on limits of exposure. The property boundary is between 63-65 metres from the ETL, so anticipated EMF exposure is extremely low.
	Have underground transmission lines been considered?	 The ETL will be 132 kV, spanning across approximately 8.5 km. The towers are likely to be monopole (single poled) structures between 25 m to 30 m high. The ETL easement will be 45 m wide. ETLs and various options that were previously assessed are detailed within the Environmental Impacts Statement (EIS). Below is an image from the EIS of a Monopole 132 kV single circuit single strain drawing.
		APPROX. 25 - 30 M HEIGHT

Issue	Detail of Issue/Recommendation	Response
		 Overhead transmission lines for renewable energy projects are considered a best practice within the industry. Underground transmission lines can result in intrusion of other underground assets or overheating, which in turn can result in damage to other assets (e.g., pipelines).
Earthworks	 What earthworks are being completed to facilitate these lines? 	The ETL is anticipated to involve localised ground disturbance at the overhead power pole locations and along the access easement.
	 Will they go in at existing ground level? 	Depth for the ETL poles is unlikely to intercept the top of the water table.
Construction Traffic	 Raises concern on construction traffic on Forest and Littles Road – how will it be enforced that these two roads will not be used, and that Back Yamma Road will remain the main entry into/out of the facility? What maintenance will be undertaken to ensure that the roads do not deteriorate particularly during wet weather under heavy vehicles? Will the impacts on these roads be determined and a monetary sum provided to Council to complete the additional maintenance as required? 	 Use of Forest Road by Project-related traffic will be prohibited. This will be enforced through signage, inductions and spot checks. All management measures will be detailed in a Traffic Management Plan Pre, mid and post construction road dilapidation reports addressing pavement and drainage structure will be undertaken on the construction access route. Any damage resulting from construction traffic will be repaired at Pacific Hydro's cost

4.2 NSW Department Submissions

Issue	Detail of Issue/Recommendation	Response		
Aboriginal Cultura	Aboriginal Cultural Heritage – Heritage NSW			
AHIMS Search	Heritage NSW notes that the Aboriginal Heritage Information Management System (AHIMS) search is greater than 12 months old at the time of submission. Heritage NSW requires, as per Requirement 1b of the Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW (DECCW 2010), that AHIMS searches be less than 12 months old. Please update the AHIMS search.	An updated search of the AHIMS database was carried out on 26/5/2022 and the details updated within the ACHA report. The updated search is included in Appendix 2 of the ACHA report.		
Track Logs/Location of Transects	Heritage NSW requires the track logs and/or location of transects surveyed in order to make an assessment of the thoroughness of the archaeological survey. It is not clear from the provided mapping the extent of survey units, landforms surveyed, and the areas within the units subject to survey.	Figures 6.1A-C in the ACHA report has been updated to include survey track logs within the survey units. It is noted that track logs represent the area walked by the archaeologist only, with the areas walked by the four Aboriginal party representatives not shown as individual track logs. The landforms associated with the survey units are included in Table 6.1 and mapped on Figures 4.3A-B. The text within the ACHA report has been updated to reflect this.		
Subsurface Material	Section 6.4 of the ACHAR outlines that there is limited potential for subsurface in situ subsurface archaeological deposit owing to disturbance caused by farming activities. However, there are extensive number of cases where such disturbances have not removed the potential for in situ archaeological deposit. The Daroobalgie Solar Project, Soil and Land Resource Assessment [SLRA report], prepared by Minesoils, dated March 2021, notes that within the Core Development Area (CDA) there is A horizon soils present to varying depths. The identification of 95 surface artefacts across the project area, especially two larger sites within the	As noted, there were 95 artefacts located within the survey area. The survey area is approximately 685 hectares representing a relatively low density of artefacts located across the area. Within the Core Development Area, of the five soil samples that had 20+cm of topsoil reported in the SLRA report, four were located within gilgai which are subject to expansion and contraction of soils. These areas typically hold water for long periods of time and it is unlikely that artefacts would have been deposited within the gilgai (where soils are deeper) but rather in the adjoining, slightly elevated areas that would have been dry and suitable for occupation (where soils are very shallow). In addition, soils associated with gilgai are unlikely to retain artefacts in situ due to the seasonal changes these areas. The remaining areas sampled contained mostly shallow topsoil (10-15cm with the exception of one area with 30cm remaining). Within these areas, there has been significant disturbance of the topsoil as a result of past and ongoing ploughing of the area associated with agricultural		

Issue	Detail of Issue/Recommendation	Response
	Electricity Transmission Line (ETL), coupled with varying depths of A horizon soils in the CDA indicate that there may be greater potential for further archaeological material than identified in the ACHAR. Provide greater explication on the potential for subsurface material and justification on why test excavations should not occur prior to construction in the project area. If adequate justification is not provided, Heritage NSW recommends that test excavations occur prior to any construction impacts in the project area.	practices (wheat and other crops). Whilst it is possible that there are artefacts within the CDA that have not been recorded, it was assessed that, within the CDA, the impacts of modern land used would have acted to disturb/destroy any such artefacts and that artefacts will not remain in situ or within their original depositional association. As such Potential Archaeological Deposits (as defined in Section 6.1.1 of the ACHAR) are not likely. No soil samples were taken along the ETL to confirm the depth of topsoil. However, the level of disturbance within these areas was comparable to the CDA. The disturbance within the ETL as a result of the Project will be minimal, approximately 1m² at each pole location and minor surface damage associated with vehicle access. As with the CDA, the artefact scatter sites are located on landforms that have been subject to ongoing disturbance and erosion such that the exposed artefacts represent the key components of the site and any additional artefacts (if present) will be in highly disturbed contexts with no integrity. As such, from an archaeological perspective, there is no justification for the completion of test excavations in these areas. The project will have a procedure in place for if artefacts are located during construction. It
		is also noted that any excavated soil will be retained on site and not removed from within the project area.
Location of Artefacts	Clarification is required on the location of artefacts within their respective site boundaries and in relation to the project area and proposed impacts. Several sites appear to be outside of the proposed SSD area and/or impact area. If these sites are not within the project area but may be harmed through construction or other works then these sites may require an Aboriginal Heritage Impact Permit (AHIP) before any harm could occur.	The location of artefacts or groups of artefacts within the site areas has been added to Figures 6.2A-B in the ACHA report. All sites outside e CDA area will be demarcated by temporary fencing as per the recommendations in Section 10.2 of the ACHA to ensure their protection. These sites are: - DSF AS9 - DSF AS8 - DSF AS6 - DSF IF6 - DSF IF5 - DSF IF5

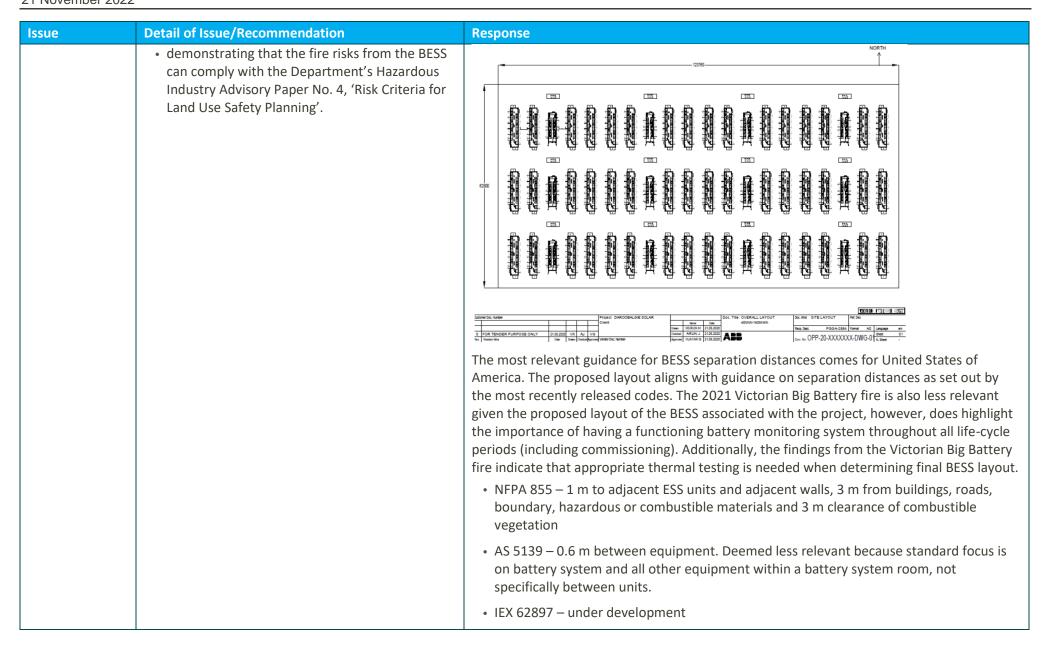
Issue	Detail of Issue/Recommendation	Response
АСНМР	The ACHAR recommends that an Aboriginal Heritage Management Plan (ACHMP) be developed and implemented for the project. Heritage NSW recommends the ACHMP should be included in the Conditions of Approval and that an ACHMP be created and approved by Department of Planning and Environment prior to any development activities occurring within the project area.	This is noted.
Agricultural Land	Use Planning	
Agricultural Management & Productivity	Agricultural productivity of the site should be recorded – advise 10 years of data including yield and an estimate of gross production information	Yield and productivity information for the solar farm site for the past 10 years is provided below • 2012 – 200 tonnes of barley and 2.5 tonnes of wool from 400 lambs • 2013 – 100 tonnes of wheat, 100 tonnes of barley, 2 tonnes of wool from 300 lambs • 2014 – 100 tonnes of wheat, 2 tonnes of wool from 300 lambs • 2015 – 150 tonnes of canola, 200 tonnes of barley and 2 tonnes of wool from 300 lambs • 2016 – 200 tonnes of wheat, 150 tonnes of canola, 100 tonnes of hay • 2017 – 100 tonnes of wheat, 2 tonnes of wool from 300 lambs • 2018 – drought fail • 2020 – 200 tonnes of wheat, 200 tonnes of barley, 200 tonnes of oats • 2021 – 450 tonnes of wheat
	 A stock management component is required to be incorporated into the Site Management Plan (SMP) if grazing is to be undertaken on site Site Management Plan should detail 	Noted. An Erosion and Sediment Control Plan and Site Management Plan will be incorporated into the Project's Construction Environmental Management Plan (CEMP)
	groundcover management during operational phases (i.e. grazing)	

Issue	Detail of Issue/Recommendation	Response
	Erosion and sediment control measures to consider ameliorating any disturbed soils on site with gypsum due to sodicity	
Biodiversity, Con	servation and Science Directorate (BCS)	
	Scattered trees within solar farm footprint advised to be considered Category 2 – regulated land unless sufficient evidence provided.	A land use categorisation assessment has been completed across the proposal site (see s. 3.1.3 and 4.6.3). This included assigning the scattered trees within the solar farm proposal site to category 2 land and completing a scattered tree assessment in line with the methodology presented in Appendix B.2 of the BAM (see s. 3.1.4, 5.6, 9.3 and Appendix B).
Categorisation	Ensure all land within development footprint assumed as Category 2 is assessed in accordance with the BAM. Where it cannot demonstrate that no native vegetation is present, it must be represented in BDAR and BAM-C via a vegetation zone.	A land use categorisation assessment has been completed across the proposal site (see s. 3.1.3 and 4.6.3). Vegetation within land identified as category 2 was assigned to a vegetation zone where native vegetation was present. Two small stands of planted vegetation that could not easily be assigned to a locally occurring PCT were mapped as such and a streamlined assessment module – planted native vegetation as per Appendix D of the BAM was completed.
Categorisation	Support any Category 1 via multiple pieces of evidence	A conservative approach to land use categorisations was adopted, with the 2017 Landuse map v1.2 and NSW Native Vegetation Extent 5m Raster v1.2 (2018 woody extent layer) used to identify land that should be mapped as category 2 and category 1 land.
	Category 2 should be assigned where presence of native vegetation is conflicting or uncertain (recommends a cautionary approach)	A conservative approach to land use categorisations was adopted, with the 2017 Landuse map v1.2 and NSW Native Vegetation Extent 5m Raster v1.2 (2018 woody extent layer) used to identify land that should be mapped as category 2 and category 1 land.
	Encourages referencing of the evidence supporting classification of each polygon to be included in attribute table of the shapefile	Source of data included in attribute table of the spatial data to be provided to BCS.
Development footprint & nature of impacts	Define, quantify, and map all direct impacts associated with the construction and ongoing maintenance of the ETL. Include details of impacts associated with construction, ETL poles to be placed, details of future management of ETL	A clear description of the proposal footprint has been provided in the BDAR (refer to s. 1.2, Figure 1.1 and 1.2 and 9.2), which defines the area of impact as being the entire proposal site.

Issue	Detail of Issue/Recommendation	Response
	corridor & GIS shapefile of development footprint which credits were calculated	
	Clarify indirect impacts associated with the proposal and ensure all BAM requirements (s. 8.2) are met	
Shrubs & Groundcover	Enter all mapped vegetation zones within the development footprint into the BAM-C, then varying degrees of impact may be reflected through IMZs	Done. All vegetation zones are in the BAM-C. Varying degrees of impact irrelevant as entire footprint has been considered to be completely cleared.
	Vegetation Integrity (VI) score for native vegetation should be set as zero (0) in the BAM-C.	Done - refer to Table 11.1 and BAM-C case for ETL and solar farm.
	Evidence and justification regarding partial loss in VI for ETL management zones	N/A - revised approach, with the entire footprint being assumed to be cleared.
	Justify exclusion of the eastern pygmy possum and masked owl from consideration across the entirety of the development site	
Credits	Explain how different spatial datasets and data sources formed land categorisation ap. Results should link to advised Acts and Regulations	A conservative approach to land use categorisations was adopted, with the 2017 Landuse map v1.2 and NSW Native Vegetation Extent 5m Raster v1.2 (2018 woody extent layer) used to identify land that should be mapped as category 2 and category 1 land. S. 3.1.3 provides the methodology used by the accredited assessor to complete the land use categorisation assessment, and refers to Local Land Services Act 2016, Local Land Services Regulation 2014 and the Native vegetation regulatory map method statement.
	Clarify indirect impacts associated with the proposals (in accordance with BAM s.8.2)	Refer to Table 9.2 - indirect impacts
	Justify exclusion of the eastern pygmy possum and masked owl from consideration across the entirety of the development site	Masked Owl - errors and omissions in reporting. The survey effort was clarified with field staff and it was confirmed the survey effort did in fact consider the Masked Owl during targeted surveys, with searches for nest trees, call playback and spotlighting completed. Species put back into the BAM-C, however not detected on site during surveys at an appropriate time of year.

Issue	Detail of Issue/Recommendation	Response
		Eastern Pygmy Possum - survey effort to date has been insufficient to exclude this species as occurring within the proposal site. Presence has been assumed and a species polygon has been drawn around areas of woodland and scrub within 200m of any patch of vegetation 5ha or larger in size.
	BDAR described survey timing, methods and effort employed	BDAR updated to include more detailed information on survey effort, including timing, methods and effort (person hours) associated with each survey type.
	Identify survey methods and effort for candidate species credit species	BDAR updated to include more detailed information on survey effort, including timing, methods and effort (person hours) associated with each survey type - refer to Tables 3.4, 3.5 and 3.6.
	Map locations targeted via each survey method and specify the date of the survey undertaken at each location	Survey effort figures updated with available data. The dates of each survey and the effort associated with each survey type are shown in Tables 3.4, 3.5 and 3.6
	Provide justification of survey method and effort if the approach differs from advised guidelines	Survey effort completed to date meets the advised approach for all but three species; the Eastern Pygmy Possum (presence has been assumed), <i>Austrostipa metatoris</i> (missed survey window by 1 day) and <i>Eleocharis obicis</i> (missed survey window by 1 day).
Targeted Surveys		Additional information relating to <i>Austrostipa metatoris</i> provided in Appendix A, including the associated PCT (PCTID 244) - the only occurrence of this PCT within the proposal site is a planted stand of juvenile trees with an understorey dominated by exotic species. The species is highly unlikely to occur within this patch of vegetation, given a lack of source material, surrounding landscape context (cropland) and planted nature of vegetation. Habitat degraded button selected in BAM-C to indicate this.
		Additional information relating to <i>Eleocharis obicis</i> provided in Appendix A - species is known to be threatened by modification of land for agriculture, grazing, trampling and weed invasion - all of which are occurring across the proposal site. Habitat degraded button selected in BAM-C to indicate this. There are no areas of suitable habitat within the proposal site that are not modified or degraded.
	Where survey was undertaken outside of survey months – provide justification for the timing using appropriate referencing	As above, the survey effort completed to date meets the advised approach for all but three species; the Eastern Pygmy Possum (presence has been assumed), <i>Austrostipa metatoris</i> (missed survey window by 1 day) and <i>Eleocharis obicis</i> (missed survey window by 1 day).

Issue	Detail of Issue/Recommendation	Response
GIS Data	Provide all GIS data as required by table 24 of the BAM.	Additional information relating to <i>Austrostipa metatoris</i> provided in Appendix A, including the associated PCT (PCTID 244) - the only occurrence of this PCT within the proposal site is a planted stand of juvenile trees with an understorey dominated by exotic species. The species is highly unlikely to occur within this patch of vegetation, given a lack of source material, surrounding landscape context (cropland) and planted nature of vegetation. Habitat degraded button selected in BAM-C to indicate this. Additional information relating to <i>Eleocharis obicis</i> provided in Appendix A - species is known to be threatened by modification of land for agriculture, grazing, trampling and weed invasion - all of which are occurring across the proposal site. Habitat degraded button selected in BAM-C to indicate this. There are no areas of suitable habitat within the proposal site that are not modified or degraded. Provided
Donartment of DI	anning & Environment (DP&E)	
Hazard Analysis – BESS	Provide further information in the Preliminary Hazard Analysis for the Department to verify the separation distances between battery sub-units (containers, enclosures etc) are sufficient to ensure a fire does not propagate between the individual sub-units including: • Verification that the battery energy storage system (BESS) would be accommodated within the area designated for the BESS, accounting for separation between BESS sub-units to prevent fire propagation. This verification should examine relevant codes and standards for BESSs (such as NFPA 855, AS 5139, IEC 62897, UL 9540, FM Global DS 5-33) and the findings of the 2021 Victorian Big Battery fire; and	The project layout of the facility at this early stage of design, has the BESS located outdoors with 2 metres between open doors of individual BESS units and 2 metres between open doors of BESS units and transformer units (where relevant). The BESS is approximately 25 metres from the closest site boundary and 100 metres from administration/ maintenance buildings. Proposed BESS layout below.



Issue	Detail of Issue/Recommendation	Response
		 UL 9540 – 1 m to adjacent ESS units and adjacent walls; reduced distances require a large-scale fire test via valid thermal testing process – UL 9540a: Test Method for Evaluating Thermal Runaway Fire Propagation in BESS - invalid with high winds (VBB findings 2022)
		 FM Global DS 5-33 – 6 m between ESS units (or provide a thermal barrier rated a minimum 1-hour) & 2.7 m from combustible elements. Noting that this is not as recently reviewed compared to other standards.
		 VBB Findings – VBB units had spacing of 0.15 m to sides and back of each unit with 2.4 m in front of each unit (UL 9540A). Fire escalation due to environmental conditions (high winds) not being considered in UL 9540A & weakness in thermal roof design. Additionally, during commissioning several monitoring and protection systems were switched to off-line service mode, which allowed the initial fault to go undetected and resulted in the total loss of two battery units Learnings: fire escalated between units separated by 0.15 m. Highlights the importance of a functioning battery monitoring system.
		The risk of fire from BESS has been assessed in section 7.6 of the Hazard and Risk assessment report. There are no expected offsite impacts given the proposed location, and as such the risk of injury, fatality or property damage is negligible and complies with HIPAP 4. The onsite fatality risk also complies with HIPAP 4.
	• Confirm ~percentage of the site that is Land Classification Class 6	 Approximately 40% of the solar farm site is classified as class 6 (~107 ha) with the remainder (60%) classified as class 4 (~161 ha)
	Confirm total footprint of the proposed transmission line pylons located within land that	 It is estimated that 16 transmission line pylons will be located in land classified as Class Therefore, the total footprint of the pylons within Class 3 land is ~0.007 ha.
Land &	is classified Class 3 odivision • Provide details on proposed subdivision (e.g. lot	The lot prior to subdivision is 1.96 ha
Subdivision		switchyard subdivision is ~0.5 ha
	areas before and after subdivision)	remainder of lot ~ 1.46 ha
	Whether site is designated as flood prone under the Forbes Local Environmental Plan 2013	The site is not designated as flood prone under the Forbes Local Environmental Plan 2013

Issue	Detail of Issue/Recommendation	Response
Landscaping	 (Confirmation from) a Landscape Architect that the proposed planting included in the landscape Mitigation Plan will be effective within 3 years of project operations. 	Confirmation provided in landscape mitigation letter (Appendix E)
	 Provide details on the maximum number of heavy vehicles during operations 	 During operations, on average it is anticipated that 1 heavy vehicle/month will access the solar farm site
Traffic & Transport	 Number of oversize and over-mass vehicle movements for the project, including upgrading and decommissioning stages 	 36 OSOM (18 one-way) movements are anticipated during project construction, operation and decommissioning
	Confirm scope of the proposed road upgrades	Road upgrade works proposed include:
	inclusive of agreement with Council	 Upgrade of Back Yamma/Troubalgie Road and Troubalgie Road/solar farm site access intersections: These intersections will be reconstructed to provide a basic right turn (BAR) and basic left turn (BAL) 100 km/h design speed in accordance with Austroads guide to road design part 4A
Road Upgrades		The intersection upgrade will allow access for the longest over-dimensional vehicle proposed to access the site (as shown in drawings provided in Appendix F).
		 Widening of Troubalgie Road between the junction of Back Yamma Road and the solar farm access: This road will be widened and sealed such that it provides two sealed lands of 3.25m and sealed shoulders 1m wide (overall width of seal will be 8.5m)
		A memo outlining the road/intersection upgrades and concept drawings as agreed with Council is provided in Appendix F. All proposed road/intersection upgrade works will be within the existing road reserve.
	Confirm length of peak construction period	Peak construction period is estimated to be 56 weeks.
Construction	Confirm number of construction jobs, during peak construction period	Peak construction workforce is ~320 people
Connection	Update of the status of the connection enquiry submitted to Transgrid	Pacific Hydro submitted a connection enquiry to TransGrid and accordingly received a connection enquiry response outlining the technical requirements to connect the proposed Daroobalgie Solar Farm. In line with TransGrid's recommendation Pacific Hydro undertook a

Issue	Detail of Issue/Recommendation	Response
		sensitivity assessment to assess the network thermal constraints and to define whether the transmission system has the thermal capacity to accept the proposed facility under reasonably foreseeable operating conditions, progressed connection applications and network contingencies. The assessment identified that the proposed BESS would assist with future growth and allow more flexibility during discharging hours. Post approval of the Project, Pacific Hydro will engage a power system consultant to commence grid performing system (GPS) studies prior to submitting a Connection Application with TransGrid for this Project.
VPA	Provide information on evidence of agreement reached between Pacific Hydro and Forbes Shire Council regarding proposed VPA	Discussions between Pacific Hydro and Forbes Shire Council on a VPA have been ongoing for more than 2 years. Whilst the main components of agreement have been agreed the final commercial terms are still under discussion. The draft VPA proposes to provide community benefits through a large contribution to an infrastructure project when the Project reaches investment sanction and ongoing contributions through Pacific Hydro's Community Benefit Sharing Program. The Community Benefit Sharing Program Guidelines are provided in Appendix G.
Figures	 Provide an amended Figure 3.6 in EIS to include: proposed landscape screening, inclusion of the switchyard as an insert, switchyard label and please amend colours so that the "key constraints" are clearly differentiated from the "O&M Compound Provide an amended Figure 6.4 in EIS to include AHIMS site near the ETL (43-3-0031), after refreshing the AHIMS search ((as requested by Heritage NSW in its submission) and amend 	Updated Figures 3.6 and 6.4 provided in Appendix H
	figure if required. • If a result of addressing submissions to this project there is any changes to the project layout or Archaeological sites figure, please make these amendments in addition to this request.	

Issue	Detail of Issue/Recommendation	Response
DP&E Water	<u>'</u>	
	 Clarify the number and location of dams which are to be retained and removed by the project 	 There are 6 existing dams on the solar farm site as shown on Figure 6.9. Four dams are to be retained and two removed:
Prior to determination	Confirm availability of an appropriately authorised water supply to meet the construction requirements. If additional water supply and works is required, identification, ability to acquire entitlement and assessment of impacts need to be demonstrated.	North central: to be removed Northwest: to be removed Centre: to be retained Southwest corner: to be retained Two dams along southwest boundary: to be retained • Pacific Hydro discussed availability of water supply with the Forbes Council Manager of Water, Melanie Slimming. Water supply to meet construction requirements can be obtained by water tanks filled up from the Lachlan Street standpipe. This standpipe is approximately 10-15km from the proposed Daroobalgie solar farm development area. Pacific Hydro can obtain a Frequency Operated Button (FOB) key from Council and be charged for the water used.
Post determination	 Location of poles and associated works for ETL consider advised guidelines Preparation of a CEMP, including erosion and sediment control mitigation measures consistent with advised guidelines 	Noted.
DP&E Crown Lan	ds	
Easement and Native Titles	Previously provided advise in pursuing two (2) options). Has stated that options provided in EIS does not result in an easement. • Highlighted Section 4.4 – Summary of permits/licences which states Native Title is resolved via consultation with NT holders.	Pacific Hydro confirms that it will obtain appropriate tenure / easement for the Crown land within the proposed corridor for the electricity transmission line (ETL). Pacific Hydro confirms that this will occur through: • An appropriate acquiring authority compulsorily acquiring the easement under the Land Acquisition (Just Terms Compensation) Act 1991 (NSW) and Subdivision M of Division 3, Part 2 of the Native Title Act 1993 (Cth) (NTA); or
	No reference within EIS of the Crown Road directly South of Lot 131 DP1272667	

Issue	Detail of Issue/Recommendation	Response
		 The lodgement of a non-claimant application with the Federal Court (seeking section 24FA protection under the NTA) and an easement under the Crown Management Act 2016.
		In addition, Pacific Hydro is also investigating additional pathways for compliance with the NTA for the grant of appropriate tenure / easements. This includes potentially using an Indigenous Land Use Agreement (ILUA) under the NTA and Subdivision K, of Division 3 of part 2 of the NTA to facilitate the grant of appropriate tenure / easement.
		Pacific Hydro confirms that the final alignment of the ETL, crosses the Crown Road directly south of Lot 131 on DP1272667. Pacific Hydro confirms that it will obtain an appropriate tenure / easement for the ETL for this Crown Road crossing. Pacific Hydro's current understanding is that native title has been extinguished and as a consequence compliance with the NTA may not be required for the grant of appropriate tenure / easement
Geological Sur	vey of NSW – Mining, Exploration & Geoscience (GSNSW)	
General	Acknowledges Pacific Hydro will continue to engage with all title holder and that consultation regarding co-existence of both parties will continue GSNSW – MEG request to be consulted in relation to the proposed location of any biodiversity offset areas or supplementary biodiversity measures.	Pacific Hydro will continue to engage with Godolphin Resources Ltd and FMG Resources Pty Ltd. Pacific Hydro will engage with GSNSW on the location of biodiversity offset areas
Fire and Rescu	e NSW (FRNSW)	
	Recommended that a Fire Safety Study (FSS) is developed in accordance with advised paper and requirements.	We suggest the requirement to undertake a FSS and Emergency Response Plan be dealt with by way of a condition of development consent
Fire Safety Study	 FSS considers operational capability of local fire agencies and need for the facility to achieve adequate level of on-site fire and life safety independences 	
	FSS be a condition of consent	

Issue	Detail of Issue/Recommendation	Response
	Recommends that an ERP and an Emergency Services Information Package is developed in accordance with advised documentation	
Forbes Council		
Worker Accommodation	Requests details regarding sufficient local accommodation to support the projects proposed use of a local workforce. Analysis should consider cumulative impacts of major events and other State Significant Developments. • A worker accommodation plan should be provided to further detail above	Once the timing of construction is known a Worker Accommodation Plan can be developed that fully considers the potential cumulative impact on housing and accommodation from other Projects under construction during the same time period. We suggest the requirement to develop a Worker Accommodation Plan be dealt with by way of a condition of development consent.
Transmission Line	Transmission line is located within Council Road reserve, will require approval with Section 138 of the Roads Act 1993, with concurrence from TfNSW. Occupation license will also be required to occupy the road reserve. Council requires both these addressed prior to the determination of the project.	Pacific Hydro understands the requirement for approval of all works within the road reserve under section 138 of the <i>Roads Act 1993</i> with concurrence from TfNSW. This approval will be sought post detailed design of the Project. We suggest the requirement to obtain these approvals be dealt with by way of a condition of development consent.
Waste Management	Additional information regarding how waste will be disposed of. Prior to determination, Council requires a Waste Management Plan for their consideration including detailed information on: • Waste types, waste quantities, opportunities for recycling, timeframes of waste generation over the life of the Project and how waste types will be managed.	This EIS commits to the development of a Waste Management Plan (section 6.10.4). The plan will be developed in close consultation with the construction contractor and Forbes Shire Council. We suggest that the requirement for a Waste Management Plan be dealt with by way of a condition of development consent.
	 Requests investigation in recycling pallets and Styrofoam 	
Road network	Requested conditions to be included in the determination document:	Further details about the proposed intersection and road upgrades, as agreed with Forbes Shire Council, are provided in Appendix F. Further consultation with Forbes Shire Council will inform the detailed design of these upgrades.

Issue	Detail of Issue/Recommendation	Response
	 Back Yamma Road & Troubalgie Road intersection - Council considers necessary that this intersection be upgraded to a Basic Left/Basic Right intersection arrangement in accordance with advised guidelines and Acts. 	The Traffic Impact Assessment (Appendix A) has been updated to prohibit use of Forest Road. Section 6.6.4 of the EIS commits to the preparation of a Traffic Management Plan in consultation with the haulage contractor, Forbes Shire Council and TfNSW. The TMP will include a driver's code of conduct.
	 Requires Troubalgie Rd and Back Yamma Rd sealing design and work requires approval by council in accordance with advised guidelines. 	
	 Intersection access to project site is designed as a Basic Left/Basic Right in accordance with advised guidelines 	
	 Forest Rd classified as incappable of accommodating additional traffic – requires shuttle bus service to prevent use of Forest Road by project-related light vehicles. Requires it to be monitored to ensure no use by parties. Procedures preventing the use of Forest Rd must be presented in a Driver Code of Conduct (DCC) as part of the conditions of consent. DCC to address: 	
	 i. Fatigue management, prevention of Forest Rd for vehicles associated to the Project, prevention of construction vehicle movements during school hours, measures to prevent impacting school bus routes & procedures to monitor and ensure compliance with DCC. 	
	ii. DCC to be approved prior to commencement of works.	

Issue	Detail of Issue/Recommendation	Response
Remediation Plan	Requests to be prepared prior to closure of the facility, with approval from Council.	We suggest that the requirement for a Decommissioning and Rehabilitation plan be dealt with by way of condition of development consent.
Voluntary Planning Agreement	Planning Agreement to be finalised prior to any consent being contemplated.	The final terms of a VPA are still being negotiated by the two parties.
NSW Rural Fire S	ervice (NSW RFS)	
Fire Protection	Fire Emergency Management and Operations Plan (FEMOP) to be prepared identifying risks and mitigation measures associated with construction and operation. Inclusive of detailed measures, working during fire bans, availability of equipment, storage of fuels and flammable materials, notification for triggering works and appropriate bush fire emergency management planning.	The solar farm has been designed in accordance with Planning for Bush Fire Protection 2019. An Asset Protection Zone of 10 m around buildings, inverters, substation and BESS has been provided for in the design (Refer section 6.8.4 of the EIS) Section 6.8.4 of the EIS commits to the preparation of a Bushfire Management Plan. We suggest the requirement to prepare this plan be dealt with by way of a condition of development consent
	Properties and associated building must be managed as an inner protection area for 10 metres in accordance with Appendix 4 of Planning for Bush Fire Protection 2019. Equipment should be designed and boused to	
	 Equipment should be designed and housed to minimise impact of bush fires and will not serve as a bush fire risk to surrounding bush. 	
Parkes Shire Cou	ncil	
Traffic & Transport	Requests appropriate conditions be imposed requiring all traffic movements to be via the Newell Highway and Henry Parkes Way, with no movements to be via local roads in the Parkes Shire (i.e. Back Yamma Road)	Local roads in the Parkes Shire will not be utilised by Project traffic. The access route for the Project will be clearly identified in the Traffic Management Plan.

Issue	Detail of Issue/Recommendation	Response
Worker Accommodation	Consideration to be given to appropriate accommodation availability, mindful of the number of other large-scale infrastructure projects occurring within the area, to facilitate the construction workforce.	Once the timing of construction is known a Worker Accommodation Plan can be developed that fully considers the potential cumulative impact on housing and accommodation from other Projects under construction during the same time period. We suggest the requirement to develop a Worker Accommodation Plan be dealt with by way of a condition of development consent.
Transport for NSV	N (TfNSW)	
	 No information provided on traffic management measures for light and heavy vehicle routes. 	The Traffic Impact Assessment has been revised to address the comments made by TfNSW. The revised TIA is provided in Appendix A. In response to comments made by TfNSW:
	 Include information on measures to ensure distribution splits will be enforced for each light and heavy vehicle route 	The distribution splits for the light and heavy vehicle routes in the TIA have been removed and it has been made clear that the use of Forest Road will be prohibited (for all traffic with the exception of the small number of heavy vehicles required for the
	 Identify overlapping scheduling of construction activities 	construction of the ETL). Figure 3.2 in the TIA has been updated to reflect the light and heavy vehicle route
	 Identify Cumulative traffic volumes of light and heavy vehicles at AM/PM peak 	 The overlapping scheduling of construction activities has been identified and the TIA updated to reflect the construction peak vehicle movements (Table 3-3)
Traffic & Transport	 Identify LV/HV turning during the AM/PM peaks at each intersection with the state classified road network 	 Traffic volumes of light and heavy vehicles at AM/PM peak is provided in Table 2.3 of the TIA.
	Traffic survey based on a one-day traffic count in 2021, a review of a Traffic Volume Viewer identifies different peaks. • Full breakdown of traffic counts is required to clearly demonstrate peak periods • Traffic survey should include Newell	 A permanent classified traffic counter site ID 6141 is located on the south side of Forbes some 190 m west of Green Road, which was used to determine annual traffic growth. For purposes of the TIA, however, classified intersection turning counts were also required to enable performance assessment of relevant intersections. The classified intersection turning counts were also used to provide mid-block traffic count information on relevant roads, such as Newell Highway and The Escort Way, including percentage of heavy vehicles
	Highway/Forest Road as part of one-day traffic survey due to being a part of the construction route.	Newell Highway/Forest Road is no-longer part of the construction route

Issue	Detail of Issue/Recommendation	Response
Intersections	Warrants for turn treatments on major roads at unsignalized intersections – identified intersections: Back Yamma Road/Newell Highway, Forest Road/Newell Highway and Daroobalgie Road/Newell Highway. • TIA to be revised to include an assessment of the turn warrants at above intersections accounting for peak AM/PM traffic volumes and peaks on the classified road network. • TIA is required to be accompanied by strategic concept design (factsheet) Safe Intersection Sight Distance (SISD) utilised outdated Google Street View Images to state Forest Road/Newell intersection achieved SISD. • Further clarification in form of longitudinal sections showing SISD is compliant with advised guidelines require in the revised TIA.	 Further assessment of the turn warrants at the Back Yamma Road/Newell Highway, and Daroobalgie Road/Newell Highway intersections has been provided in sections 2.1.3 and 3.1.5 of the TIA. It was agreed with TfNSW in a meeting on 1/6/22 that a strategic concept design is not required if an intersection upgrade is not required. The Forest Road/Newell Highway intersection will not be utilised by Project traffic. Therefore, the SISD assessment has been removed from the TIA
Haulage Routes	Haulage routes from the rail line terminals to the project have not been included. TIA to be revised to include routes and provide traffic volumes and distribution split between each rail siding location to the site Clarification on whether traffic volumes have been based on use of railway line as form of transportation or based on the 'worst case scenario' for transportation by road within the revised TIA	To support the NSW State Government's target for increased rail modal share, the project will explore the use of rail for haulage of project components. Rail is a safe, efficient and ideal choice for transporting the many intermodal shipping containers that will be used to deliver solar panels and other components. For purposes of this assessment, however, all components and materials have been assumed to travel by road. Upon further investigation, should a decision be taken for rail to be used to transport components, a Modification Application would be lodged, seeking the necessary approvals for this change to the proposal.

4.3 Other Submissions

Issue	Detail of Issue/Recommendation	Response			
APA Group (APT	APA Group (APT Pipelines NSW)				
High pressure pipeline	APA accepts the proposed development subject to compliance with nine conditions: no improvements within Easement, risk assessment required, electrical interference studies, design to comply with Australian Standards, high voltage powerlines, construction management plan, easement delineation on site, easement delineation on plans and pipeline operator access.	Pacific Hydro did consult with APA during the development of the EIS. Many attempts were made to contact APA through both the planningnsw@apa.com.au email address and Phillip Mccutcheon. After 5 months of attempted and failed consultation, contact was made with Michael Mielczarek on 15/2/22. Michael provided advice on APA requirements for the ETL crossing of the pipeline which are detailed in the EIS. We suggest APAs requirements as detailed in their submission be dealt with by way of condition of development consent			
ARTC					
General	 Construction/installation of the ETL would be subject to the following conditions: Pacific Hydro is to obtain written approval from the appropriate Environmental Planning Approval Authority that they will enter into a Licence for Infrastructure of the 132 kV transmission line (crossing at 603.730km). This agreement will govern the works in the rail corridor and the ongoing occupation of the infrastructure upon completion. ARTC will not agree to an easement over the rail corridor. ARTC Fees (noting these are subject to change) 	Noted. To be incorporated into conditions of consent			
	 Design, construction and corridor entry needs to be in accordance with: a) ARTC Network Rules and Procedures including but not limited to RLS-PR-003. b) ARTC Standards, Policies and Procedures. 				

Issue	Detail of Issue/Recommendation	Response
	c) Any relevant Australian Standards.	
	 d) All relevant safety documentation including but not Safe Work Method Statement relating to working in the rail corridor 	
	Special Conditions	
	a) Any works are not to have a negative impact on ARTC Operations	
	b) The works are not to have a negative hydraulic impact on ARTC property	
	 c) Services Searches, surveys or other preliminary corridor entry to be conducted under separate ARTC approval. 	
Transgrid		
General	Transgrid have stated that they will not complete a detailed review until the Daroobalgie Solar Farm becomes a customer project. Transgrid do note that Pacific Hydro have included a new transmission line in the EIS. Once a customer project, Pacific Hydro to engage with Transgrid via a Connection Processes Agreement to facilitate the connection to Transgrids network.	Pacific Hydro submitted a connection enquiry to TransGrid and accordingly received a connection enquiry response outlining the technical requirements to connect the proposed Daroobalgie Solar Farm. In line with TransGrid's recommendation Pacific Hydro undertook a sensitivity assessment to assess the network thermal constraints and to define whether the transmission system has the thermal capacity to accept the proposed facility under reasonably foreseeable operating conditions, progressed connection applications and network contingencies. The assessment identified that the proposed BESS would assist with future growth and allow more flexibility during discharging hours. Post approval of the Project, Pacific Hydro will engage a power system consultant to commence grid performing system (GPS) studies prior to submitting a Connection Application with TransGrid for this Project.

5. Updated Environmental Management Measures

In response to submissions received, this report proposes a number of additional environmental management and mitigation measures to those already provided in Table 7.1 of the EIS. Additional management and mitigation measures are detailed in Table 5.1 below.

Table 5.1 Additional Environmental Management Measures

Topic	Management Measure
Landscape screening	Provide screen planting along the boundary of the Forest Road property to reduce the visual impact of the transmission line poles from from the house
Socio- Economic	Develop a Workers Accommodation Plan for the Project prior to construction. The plan should consider the accommodation needs of other State Significant Developments under construction in the region at the time of development.
Traffic	 Ensure the Traffic Management Plan includes a Driver Code of Conduct which addresses: Driver fatigue management Prevention of the use of Forest Road for all vehicles associated with the project Prevention of construction vehicle movements during 8 am – 9 am and 4 pm – 5.30 pm Monday to Friday
	 Measures to prevent impacting school bus routes Procedures to monitor and ensure compliance with the Driver Code of Conduct The Driver Code of Conduct should be to the satisfaction of Council and approved prior to the commencement of construction
Environmental Management	An Erosion and Sediment Control Plan and Site Management Plan will be incorporated into the Project's Construction Environmental Management Plan (CEMP)
Railway crossing	In regard to the ETL that will cross the Stockinbingal to Parkes Railway line, prior to the commencement of construction, Pacific Hydro must: - Obtain written approval from the appropriate Environmental Planning Approval Authority that they will enter into a Licence for Infrastructure of the 132 kV transmission line (crossing at 603.730km). This agreement will govern the works in the rail corridor and the ongoing occupation of the infrastructure upon completion. ARTC will not agree to an easement over the rail corridor. - Pay ARTC Fees (noting these are subject to change): a) Application b) Ongoing Licence rental fees c) Project specific Third Party Review costs - Ensure the design, construction and corridor entry is in accordance with: a) ARTC Network Rules and Procedures including but not limited to RLS-PR-003. b) ARTC Standards, Policies and Procedures. c) Any relevant Australian Standards. d) All relevant safety documentation including but not Safe Work Method Statement relating to working in the rail corridor - Ensure that: a) Any works are not to have a negative impact on ARTC Operations b) The works are not to have a negative hydraulic impact on ARTC property

Topic	Management Measure
	c) Services Searches, surveys or other preliminary corridor entry are conducted under separate ARTC approval.
High pressure pipeline crossing	Prior to the commencement of construction, details of all proposed crossing and works within the pipeline easement must be submitted to APA for consideration. The proposal must comply with the following conditions:
	 No improvements within Easement - Buildings, structures, roadway, pavement, pipeline, cable, fence, change in ground level, or any other improvement on or under the land, must not be constructed within the gas transmission pipeline easement, without the prior authorisation of APA. This includes both temporary and permanent improvements of the type detailed above. All construction workers on site must be made aware of this requirement.
	 Risk Assessment Required - Prior to the development commencing, and to inform detailed design, the applicant must conduct electrical hazard studies in accordance with (the requirements of) Australian Standard 4853-2012 (for Low Frequency Induction and Earth Potential Rise). The applicant must address any relevant requirements and any recommendations and/or actions must be implemented to the satisfaction of APA. All costs associated with the study and implementing its recommendations and/or actions are to be borne by the applicant. The applicant must complete validation testing upon completion of construction.
	 Electrical Interference Studies - The applicant must conduct electrical interference studies in accordance with the requirements of AS2832 once detailed design is complete.
	 Design to Comply with Australian Standards - The applicant must prepare a pipeline crossing design as required in order to obtain results for the electrical interference studies and electrical hazard studies which comply with the applicable Australian Standard and promptly provide a copy of the studies and reports to APA.
	 High Voltage Powerlines - The applicant must make good (at the applicant's cost) any hazards or risks to the Marsden to Dubbo Pipeline (including cathodic protection systems), caused by any powerlines, or associated infrastructure.
	 Construction Management Plan - Prior to the commencement of any works on land within 50 metres of the pipeline easement, a construction management plan must be submitted to and approved by APA. The plan must:
	 Prohibit the use of rippers or horizontal directional drills unless otherwise agreed by the operator of the gas transmission pipeline.
	 Avoid significant vibration, heavy loadings stored over the pipeline and heavy vehicle /plant crossings of the pipeline within the easement.
	 Be endorsed by the operator of the gas transmission pipeline where the works are within or crossing the relevant gas transmission easement.
	 Easement Delineation On Site - During construction, the boundary of the easement must be clearly delineated on site by temporary fencing (or other means as agreed by APA), and clearly marked as a hazardous work zone/ restricted area. Crossing of the easement during construction must only be at points agreed to by APA and designed and built to APA's standards.

Topic	Management Measure
	 Easement Delineation On Plans - All plans which include the area of the gas pipeline easement must have the easement clearly identified with hatching on the full width of the easement. The easement must also be clearly labelled as 'high pressure gas pipeline easement – no works to occur without the prior authorisation of the pipeline operator'.
	 Pipeline Operator Access - The ability of the pipeline operator to access the easement must be maintained at all times to facilitate prompt maintenance and repairs. This may be through interlocking padlocks so APA has keyed access as any time. APA field officers will undertake any necessary site induction to facilitate unaccompanied access.
Crown land	Pacific Hydro must obtain appropriate tenure / easement for the Crown land within the proposed corridor for the electricity transmission line (ETL)
Hazard and Risk	Prior to construction a comprehensive Fire Safety Study should be developed in accordance with the requirements of Hazardous Industry Planning Advisory Paper (HIPAP) No 2 and is to meet the requirements of Fire and Rescue NSW.
	Prior to the commencement of construction an Emergency Services Information Package (ESIP) be prepared in accordance with Fire and Rescue NSW fire safety guideline – Emergency services information package and tactical fire plans.
	A Bush Fire Emergency Management and Operations Plan should be prepared identifying relevant risks and mitigation measures associated with the construction and operation of the solar farm. This should include:
	Detailed measures to prevent or mitigate fires igniting
	Work that should not be carried out during total fire bans
	Availability of fire-suppression equipment, access and water
	Storage and maintenance of fuels and other flammable materials
	 Notification of the local NSW RFS Fire Control Centre for any works that have the potential to ignite
	Surrounding vegetation, proposed to be carried out during a bush-fire fire danger period to ensure weather conditions are appropriate
	Appropriate bush fire emergency management planning
	From the commencement of building works, and in perpetuity, the property around the proposed structures and associated buildings must be managed as an inner protection area for a distance of 10 metres in accordance with the following requirements of Appendix 4 of Planning for Bush Fire Protection 2019:
	Tree canopy cover should be less than 15% at maturity
	Trees at maturity should not touch or overhang the building
	Lower limbs should be removed up to a height of 2m above the ground
	Tree canopies should be separated by 2 to 5m
	Preference should be given to smooth-barked and evergreen trees
	 Create large discontinuities or gaps in the vegetation to slow down or break the progress of fire towards
	Buildings should be provided

Topic	Management Measure
	Shrubs should not be located under trees
	Shrubs should not form more than 10% ground cover
	Clumps of shrubs should be separated from exposed windows and doors by a distance of at least twice
	The height of the vegetation
	 Grass should be kept mown (as a guide, grass should be kept to no more than 100mm in height)
	Leaves and vegetation debris should be removed
	Essential equipment should be designed and housed in such a way as to minimise the impact of bush fires on the capabilities of the infrastructure during bush fire emergencies. It should also be designed and maintained so that it will not serve as a bush fire risk to surrounding bush.

6. Conclusions

This RTS has been prepared to provide further information on the issues/concerns raised in the 18 submissions received during public exhibition of the EIS. Two submissions were received from individual members of the public and 16 from public authorities/government agencies. No objections were received. This report makes one change to the proposal. Pacific Hydro has committed that all construction site access will be via Back Yamma Road and Troubalgie Road and that Forest Road will be prohibited for use by Project-related traffic.

13 new environmental management measures have been proposed to address concerns raised during the submissions. With these measures in place, it is considered that all potential impacts associated with the Project are deemed acceptable and the Project should be approved with the proposed conditions.

Appendix A	Traffic and Transport Assessment
Appendix B	Biodiversity Development Assessment Report
Appendix C	Aboriginal Cultural Heritage Assessment
Appendix D	Preliminary Hazard Analysis Report
Appendix E	Landscape Mitigation Memo
Appendix F	Road/Intersection Upgrade Memo
Appendix G	Community Benefit Sharing Program Guidelines
Appendix H	Updated EIS Figures