Title of Proposal - Prairie Solar Farm, Mitiamo, 65 kms north of Bendigo

Section 1 - Summary of your proposed action

Provide a summary of your proposed action, including any consultations undertaken.

1.1 Project Industry Type

Energy Generation and Supply (non-renewable)

1.2 Provide a detailed description of the proposed action, including all proposed activities.

Pacific Hydro Australia Developments Pty Ltd (Pacific Hydro) has lodged a planning permit application with Loddon Shire Council to construct and operate the Prairie Solar Farm to be located approximately 2 kilometres (kms) west of Mitiamo, northern Victoria.

The Prairie Solar Farm will comprise the installation of approximately one (1) million solar photovoltaic (PV) panels and associated infrastructure (i.e. substation, terminal station, battery storage area, inverters, power cabling, site offices, car parking, new access tracks and temporary construction facilities) and a transmission line extension to connect the solar farm into the electricity grid. The project will have an estimated capacity of approximately 240 megawatts (MW) and will provide enough electricity to power up to the equivalent of 114,000 homes each year and result in savings of approximately 426,880 tons of carbon dioxide emissions. The final layout and capacity of the solar farm facility will be determined during detailed design stage and subject to the conditions of the planning permit and any other approvals granted.

The project seeks to generate electricity from renewable energy and connect into the National Electricity Market (NEM), whilst assisting in the reaching of greenhouse gas reduction targets in Victoria and Australia. The project is proposed to connect to the existing Bendigo-Kerang 220kV electricity transmission line located along Bendigo-Pyramid Road via a 4.5 km long dedicated transmission line extension from the solar farm (referred to as the core development area). The core development area is approximately 950 hectares in area.

Demolition
Removal of selected farm fences and other incidental structures to enable construction of access points, access tracks and other infrastructure required by the project.

Buildings and works (including earthworks)
Site establishment works: Site levelling works, including placing clean engineered fill into the existing on-site private irrigation channels and farm dams.
- Temporary construction compounds: Construction of two (2) temporary site compounds including offices, material stockpile and laydown areas to accommodate the laydown of construction materials and infrastructure, and temporary car parking during construction phase.
- Vehicular site access points: Construction of new/upgraded site access points at Bendigo-

Pyramid Road, Echuca-Serpentine Road, McCreas Road, and potentially Bucklands Road.
- Access tracks: Construction of new internal access roads. A combination of major access roads approximately 22 m wide constructed with crushed rock (or similar) and minor access tracks approximately 5.0 m wide constructed with compacted soil (or similar) are proposed.
- Vehicular creek crossings: Construction of approximately five (5) vehicular creek crossings, associated drainage infrastructure (e.g. culverts) and underground cabling across Bullock Creek. Each crossing is proposed to have an approximately 5.0 m wide trafficable area.
- Solar photovoltaic (PV) panels: Installation of approximately one (1) million PV panels mounted on either fixed-tilt or single-axis-tracking structures, with a height of up to 4.0 m when fully tilted. The lowest point of the panels when fully tilted will be above the 1% Annual Exceedance Probability (AEP) flood event (approximately 1.0 m)
- Power Conversion Units (PCUs): Installation of approximately 55 x PCUs (also known as inverters) at regular intervals and associated underground cabling designed to operate below 66kV. Typically, a PCU is approximately 12 m long x 2.5 m wide x 2.9 m high.
- Substation and battery storage area: Construction of a single 33kV/220kV substation to increase voltage to 220kV and associated battery storage area. A 220kV substation typically occupies a footprint of approximately 85 m long x 60 m wide with electrical components generally between 5.0 m to 10 m tall. Note: Two (2) optional substation locations are shown in Figure 4, however only one will be required. Solar PV panels are proposed to be installed at the alternative substation location option.
- Operations and Maintenance (O&M) facility: Construction of an O&M building that contains site offices, amenities and equipment shed. An O&M building is approximately 12 m wide x 32 m long x 3.7m high.
- Earthworks to construct raised earth pads/benches: Construction of raised earth pads/benches to elevate the substation/O&M facility/battery storage area and terminal station to a minimum of 300 mm above the 1% AEP flood event.
- Terminal station: Construction of a terminal station adjacent to the existing 220kV transmission line located along Pyramid-Yarraberb Road, to enable a connection of the solar farm to the national electricity grid. The 220kV terminal station is expected to occupy a footprint of approximately 250 m long x 250 m wide, with electrical components generally between 5.0 m to 10 m tall.
- Transmission line extension: Construction of a transmission line extension within a 40 m wide easement between the proposed substation and terminal station. No PV panels are proposed within the easement. This is expected to involve the installation of approximately 11 steel lattice transmission towers generally located at regular intervals (approximately 450 m centres) between the proposed substation and terminal station. Each lattice tower is expected to measure approximately 6 m x 6 m at the base with a height of approximately 40 m. Note: during detailed design phase further assessments will be undertaken to determine whether poles may be used instead of steel lattice towers to further minimise the construction footprint and removal of native vegetation.
- Perimeter security fencing: Construction of perimeter security fencing made from chain-wire mesh and strainer wire around the proposed infrastructure, at a height of approximately 2.1 m. No additional vegetation removal is required.
- Car parking: Provision of approximately eight (8) car parking spaces for employees/visitors during operation phase as part of the O&M building.

Land uses

Proposed land uses as defined in Clause 74 of the Victorian Planning Provisions (VPPs) are:
- Renewable energy facility (solar farm); and
- Utility installation

Removal of native vegetation

Removal of 2.089 ha of native vegetation, which is comprised of 1.808 ha of patches of native vegetation, and 13 trees (including 11 Large trees). This total considers direct and indirect losses associated with the project.

Offsets of 1.273 General Habitat Units with a Strategic Biodiversity Score of 0.594 within the Loddon Shire Council area or North Central CMA area are required.

1.3 What is the extent and location of your proposed action? Use the polygon tool on the map below to mark the location of your proposed action.

Area	Point	Latitude	Longitude
Project boundary	1	-36.211236100897	144.20914471105
Project boundary	2	-36.248623253115	144.2094880338
Project boundary	3	-36.255960113655	144.19867336705
Project boundary	4	-36.256236962828	144.14030849889
Project boundary	5	-36.263988341332	144.14048016026
Project boundary	6	-36.263573108412	144.13206875279
Project boundary	7	-36.255129560251	144.13206875279
Project boundary	8	-36.254714280238	144.18631374791
Project boundary	9	-36.211374604808	144.18682873204
Project boundary	10	-36.211374604808	144.20914471105
Project boundary	11	-36.211236100897	144.20914471105

1.5 Provide a brief physical description of the property on which the proposed action will take place and the location of the proposed action (e.g. proximity to major towns, or for off-shore actions, shortest distance to mainland).

Site location

The site is located approximately 2 kms west of the small town of Mitiamo, and approximately 230 kms north of Melbourne CBD, in north central Victoria. The project site is generally bounded by Bendigo-Pyramid Road to the north, Bucklands Road to the east, Echuca-Serpentine Road

to the south, and Pyramid-Yarraberb Road and McCreas Road to the west.

The project site is located within a broader landscape that is characterised by very flat riverine plains which have been largely cleared, with pockets of remnant vegetation along creek lines. The elevation of the site rises gently from the north to south, ranging from approximately 98m AHD in the north of the site to approximately 104m AHD in the south. The project site is located within the Victorian Riverina bioregion and the Loddon River basin, and has annual rainfall of about 420mm.

The development footprint extends across approximately 975 ha of rural agricultural land. The core development area is bisected by Bullock Creek which flows south to north through the site.

1.6 What is the size of the proposed action area development footprint (or work area) including disturbance footprint and avoidance footprint (if relevant)?

975 ha total area. The project avoids impact to mapped wetlands (totalling ~60 ha) and the Bullock Creek Crown land area.

1.7 Is the proposed action a street address or lot?

Lot

1.7.2 Describe the lot number and title. Multiple lots - see attached file titled "Prairie - Description of lot number and title"

1.8 Primary Jurisdiction.

Victoria

1.9 Has the person proposing to take the action received any Australian Government grant funding to undertake this project?

No

1.10 Is the proposed action subject to local government planning approval?

Yes

1.10.1 Is there a local government area and council contact for the proposal?

Yes

1.10.1.0 Council contact officer details

1.10.1.1 Name of relevant council contact officer.

Alexandra Jefferies

1.10.1.2 E-mail

AJefferies@loddon.vic.gov.au

1.10.1.3 Telephone Number

(03) 5494 1259

1.11 Provide an estimated start and estimated end date for the proposed action.

Start date 01/2020

End date 01/2030

1.12 Provide details of the context, planning framework and State and/or Local government requirements.

The following planning permits are required under the Loddon Planning Scheme for the use and development of land for the Prairie Solar Farm project:

- Use of the land for a Renewable energy facility (Solar farm) under Clause 35.07 (Farming Zone) that meets the requirements of Clause 52.42 (Renewable energy facility - other than Wind energy facility and Geothermal energy extraction);

- Use of the land for a Utility installation under the Farming Zone;

- Construct a building or carry out works associated with the development of a Renewable energy facility under the Farming Zone;

- Construct a building or carry out works under the Floodway Overlay (FO), Land Subject to Inundation Overlay (LSIO), and Public Conservation and Resource Zone (PCRZ);

- Create or alter access to a Road Zone, Category 1 under Clause 52.29 (Land adjacent to a Road Zone, Category 1); and

- Removal of native vegetation under Clause 52.17 (Native vegetation).

Planning Zones and Overlays

The project site is affected by the zones and overlays listed below:

Zones

Farming Zone (FZ)

Applies to the entire project area except the Bullock Creek Crown land corridor.

Public Conservation and Resource Zone (PCRZ)

Applies to the Bullock Creek Crown land corridor.

Road Zone Category 1 (RDZ1)

Applies to Bendigo-Pyramid Road

Overlays

Floodway Overlay (FO)

Applies to a large proportion of the core development area including Bullock Creek and a small portion of the transmission line extension.

Land Subject to Inundation Overlay (LSIO)

Applies to the land in the northwest and southeast corners of the core development area and a small portion of the transmission line extension.

Vegetation Protection Overlay – Schedule 1 (VPO1)

Applies to approximately 56 ha of land in the south east corner of the core development area.

Bushfire Management Overlay (BMO)

Applies to a very small area on the southern boundary of the broader site. No land use and development is proposed on land affected by the BMO.

1.13 Describe any public consultation that has been, is being or will be undertaken, including with Indigenous stakeholders.

Consultation completed to-date

Pacific Hydro has consulted widely with relevant State agencies and Loddon Shire Council as well as the broader community throughout the development of the concept design for the project. The main methods of consultation have been face-to-face meetings, presentations, door-knocks, and a community drop-in session, as well as regular updates to Pacific Hydro’s

dedicated online project page at:
http://www.pacifichydro.com.au/english/projects/development/prairie-solar-farm/.

In addition, some consultation with referral agencies has occurred on behalf of Pacific Hydro by our team of consultants during the preparation of specialist background reports used to support this planning permit application. A summary of consultation undertaken to-date for the project is provided in the table below.

Community consultation

Door-knock of adjoining owners/occupiers and face-to-face meetings with key community members and Loddon Primary School. No major issues raised. - **16 May 2018**

Community drop-in session at the Mitiamo Football clubhouse. No major issues raised. - **24 April 2018**

Publish project updates and fact sheets on Pacific Hydro website. **Ongoing during permit approval process, construction and operation phases**

Loddon Shire Council

Pre-application meeting with council officers (planner, economic development and transport units). No major issues raised. - **28 February 2018**

Briefing to the full sitting of the Loddon Shire Council Councillor Forum. No major issues raised. - **8 May 2018**

Department of Environment, Land, Water and Planning (DELWP) (Biodiversity and Public Land Manager)

Regular contact with DELWP Loddon Mallee Region who assessed the native vegetation and biodiversity aspects of the project as part of the application for Public Land Manager Consent. - **April to August 2018**

VicRoads

Meeting with VicRoads officers at the Bendigo office. Main issues raised are discussed in

Section 5.3 (Traffic impacts). - **30 May 2018**

North Central CMA

NCCMA were consulted during the preparation of the Watertech report *Surface Water Assessment: Prairie Solar Farm* (see Appendix 8). - **N/A**

Country Fire Authority (CFA)

Meeting with CFA officers at the Burwood head office. Main issues raised are discussed in Section 5.7 (Bushfire risk). - **18 May 2018**

Goulburn-Murray Water

An email and telephone request for advice was placed on 10 May 2018. No reply has been received. - **N/A**

Dja Dja Wurrung Registered Aboriginal Party (RAP)

Inception meeting and follow-up results meeting to discuss the preparation of the CHMP for the project. No major issues raised. **15 March 2018, 5 June 2018, and 16 August 2018.** *Note: The finalised CHMP is expected to be lodged with the RAP in August 2018.*

Worksafe (Dangerous Goods Division)

Discussion with Manager, Dangerous Goods Division regarding the proposal for battery storage at the site. No major issues raised. **11 May 2018**

Consultation throughout project delivery and operation phases

Pacific Hydro is committed to work collaboratively with Loddon Shire Council and the broader community during any notification process as part of this permit application, and make every reasonable attempt to clarify matters and resolve issues that may be raised. On 15 August 2018 Council notified adjoining landholders of the planning permit application and published an advertisement in the Loddon Times local newspaper. Public comment on the application will

close on 4 September 2018.

During the detailed design, construction, and operation phases of the project, Pacific Hydro will continue to provide updates to the community by way of community drop-in information sessions and publishing updates and fact sheets on the dedicated online project webpage.

Pacific Hydro has a well-established complaints management process to ensure that any issues raised during construction or operation are attended to in a timely and effective manner. This process will be implemented for the entire life of the Prairie Solar Farm.

1.14 Describe any environmental impact assessments that have been or will be carried out under Commonwealth, State or Territory legislation including relevant impacts of the project.

Environmental Management and Monitoring Plans

To ensure best-practice environmental management during construction and operation phases of the Prairie Solar Farm, and the project will incorporate and implement a Construction and Environmental Management and Monitoring Plan (CEMMP) and an Operational and Environmental Management and Monitoring Plan (OEMMP) for these phases respectively. The CEMMP and OEMMP will contain a series of Environmental Management and Monitoring Plans (EMMPs) relevant to each phase. The detailed EMMPs will be prepared and implemented in accordance with the Project Environmental Management Framework (EMF) that Pacific Hydro proposes for the project (see Appendix 5) and any relevant planning permit conditions.

The Project EMF sets out the list of detailed EMMPs that are anticipated to be required for the project and the relevant matters and mitigation measures that should be addressed at a minimum. The Project EMF incorporates the mitigation measures recommended in the specialist background reports prepared for the project. The Project EMF requires the following detailed EMMPs to be prepared:

- Water Quality Management Plan (including stormwater management, sedimentation and erosion prevention, hazardous chemicals)

- Noise Management Plan

- Traffic Management Plan / Detailed Traffic Impact Assessment Report

- Fire and Emergency Management Plan

- Native Vegetation Management Plan

- Pest Management Plan

- Heritage Management Plan

- Site Rehabilitation Plan

Flora and fauna

GHD prepared the *Flora and Fauna Assessment: Prairie Solar Farm* report which provides a detailed assessment of the potential direct and indirect impacts associated with the siting and design of the proposed solar farm infrastructure and the transmission line extension.

The project will result in the loss of 2.089 ha of native vegetation, which is comprised of 1.808 ha of patches of native vegetation, and 13 trees (including 11 Large trees). The native vegetation removal proposed by the project triggers the need for General offsets only under the Victorian *Guidelines for removal, destruction or lopping of native vegetation* (DELWP, 2017).

The proposed layout minimises the impact of the project on native vegetation and ecological values at the site by avoiding development of three mapped wetlands located within the project site and adopting a sensitive approach to vegetation clearance within the proposed 40 m wide transmission line easement. Within the easement native vegetation removal has been minimised to the greatest extent possible in order to meet standard vegetation management rules for electrical safety purposes. Native vegetation removal within the easement, is comprised of the following:

- Removal of all trees above 3 m in height within the 40 m wide easement.

- Removal of all trees and grasses in a 10 m x 10 m footprint at each proposed tower location.

- Removal of all trees within a 20 m radius from the centre of each transmission tower.

- Removal of trees and grasses to construct the 4 m wide access track along the length of the transmission line extension, including across Bullock Creek (shown as Creek crossing #12 on Figure 5 – Project layout plan).

For the purpose of calculating the loss of native vegetation and associated offset obligations a worst-case vegetation removal scenario has been assumed. However, Pacific Hydro will ensure impacts to flora and fauna are further minimised during construction, by adopting an avoid and minimise approach, which will involve amongst other things:

- Ensuring construction activities are adequately fenced from vegetation identified to be retained.

- Identifying opportunities to retain vegetation that has been identified for removal, wherever practicable.

- Ensuring vegetation removal is minimised along the proposed 4 m wide access track along the length of the transmission line extension and across Bullock Creek. This access track will not be a fully constructed track, but rather an informal track of compacted earth that is created by

vehicles driving along the same alignment. This track will be used during installation of the transmission towers and stringing of electrical cabling during construction, and for periodic safety inspections and maintenance activities. It is estimated that the track would be used approximately once per month for these purposes. It is therefore highly likely that actual loss of native vegetation along the length of the 4 m wide access track will be much less than calculated in the GHD report.

The GHD report assessed the potential impacts of the project against the *Matters of National Environmental Significance – Significant impact guidelines 1.1 Environment Protection and Biodiversity Conservation Act* (the EPBC Guidelines). The GHD report concludes that the project is not expected to result in a significant impact to the EPBC-listed Natural Grasslands of the Murray Valley Plains flora community and South-eastern Long-eared Bat, and therefore does not warrant referral under the EPBC Act. Notwithstanding the conclusion of the GHD report, as a standard procedure Pacific Hydro is referring the project under the EPBC Act to mitigate potential project risks.

Cultural heritage

Aboriginal cultural heritage

The project is considered to be a high impact activity within an area of Cultural Heritage Sensitivity (CHS) and therefore the project triggers the need for a mandatory Cultural Heritage Management Plan (CHMP) pursuant to the *Aboriginal Heritage Act 2006*. The site is located within the Dja Dja Wurrung Registered Aboriginal Party (RAP) area, and the CHMP must be lodged with the RAP for assessment and determination.

Ecology and Heritage Partners (EHP) are currently preparing the CHMP for the project. Throughout the CHMP preparation process, Pacific Hydro and EHP have been working closely with the Dja Dja Wurrung to ensure the project design minimises as far as practicable impacts to Aboriginal cultural heritage.

A Standard Assessment (including surface survey) has been completed and Complex Assessment (including sub-surface testing) is due to be completed shortly. The CHMP is expected to be lodged with Dja Dja Wurrung for assessment in August 2018. Once approved by the RAP, a copy of the approved CHMP will be provided to Loddon Shire Council as the Responsible Authority so that it can make a determination on this planning permit application.

Post contact heritage

There are no heritage overlays or heritage places registered under the *Heritage Act 2017* at the project site.

During a cultural heritage walk-over a potential post-contact archaeological site was identified in the south eastern portion of the project site adjacent to Bucklands Road (see Figure 3 – Existing conditions plan).

Heritage Victoria has been notified of the potential archaeological site, and a brief report is being prepared to submit to Heritage Victoria for advice on whether further assessment of the potential site and protection under the *Heritage Act 2017* is required.

In the event that the potential post-contact archaeological site warrants protection under the *Heritage Act 2017*, it is expected that impacts can be avoided and addressed through detailed design and via secondary consent processes (i.e. addressing planning conditions). The Project EMF developed for the project includes a requirement to avoid impact to any post - contact heritage sites protected under the *Heritage Act 2017* unless the necessary approvals have been granted (see Appendix 5).

Transport and traffic

Jacobs prepared the *Traffic Impact Assessment: Prairie Solar Farm* report which assesses the operational performance of the road network in the vicinity of the project site and any traffic and road safety implications of the proposed development (see Appendix 9). The Jacobs report has been prepared to account for a conservative or “worst-case” traffic impact scenario associated with the construction and operation of the project. The Jacobs report concludes that the project is unlikely to have an adverse impact on the operation of the existing road network adjacent to the site during construction or operation.

The main off-site traffic impacts of the proposed Prairie Solar Farm will arise during the construction period due to the transport of construction material and equipment to the site and the transportation of construction staff to/from site. The Jacobs report accounts for all the estimated truck movements required to import approximately 100,000 cubic metres of clean fill to the site. The fill is proposed to construct two large raised earth pads/benches for the proposed substation/battery storage area and terminal station areas to a height of approximately 1.0 m above natural ground level in order to provide 300mm freeboard above the 1% Annual Exceedance Probability (AEP) flood event level.

The surrounding road network experiences very low existing traffic volumes. The expected daily construction vehicle trips to site range from 99 to 343 trips per day, with an average of 212 daily trips across a 13 month construction period. Under the worst-case construction traffic scenario (which is highly unlikely) where the total number of daily trips are made in a single hour along Bendigo-Pyramid Road, the road would operate at approximately 40% of its capacity. As other access points are proposed (i.e. Echuca-Serpentine Road, McCreas Road and potentially Bucklands Road), the impact on Bendigo-Pyramid Road would be significantly reduced. The report also finds there would be negligible impact on the other access roads due to their low existing traffic volumes.

Once the solar farm is operational, it is expected that an operational team of approximately eight (8) staff will be required. Maintenance activities will be ongoing throughout the operation of the solar farm, however there will be some maintenance activities which will occur on a periodic basis, which may generate short term increases in staff and visiting maintenance trips to the solar farm. During operations Bendigo-Pyramid Road is likely to operate at less than 3%

capacity and therefore, the impact from additional traffic generated by this project during the operational phase is considered negligible.

The Jacobs report recommends that a detailed Traffic Management Plan (TMP) is prepared when a haulage contractor has been appointed and the finer details of the proposed solar farm have been determined (i.e. construction approach, methodology, and schedule). The TMP will identify any upgrades to nearby roads that may be required and ensure that the condition of public roads to be used for the delivery of materials is suitable prior to commencement of works and then regularly monitored and maintained as required during construction.

Flood risk assessment

Water Technology (Watertech) prepared the *Surface Water Assessment: Prairie Solar Farm* which investigated the risk of flooding from waterways located in the floodplain and inundation caused by direct rainfall. The report also assessed the potential impacts of the proposed solar farm with respect to overland flows through the existing waterways and drainage pathways.

The Watertech report concluded that both riverine (floodplain) and local overland runoff present risks of flooding at the project site. Much of the site is completely inundated with water to depths of between approximately 10 cm to 75 cm during the 1% Annual Exceedance Probability (AEP) flood event level. Depths rise to approximately 1.0 m within the Bullock Creek channel. Despite this, the low velocities combined with the range of flood depths across the site indicate a low flood hazard across the site. These findings are consistent with observations and assessment of the 2011 major flood event that impacted the region.

Key electrical infrastructure is proposed to be elevated a minimum of 300mm above the 1% AEP flood event level. To achieve this, the PV panels will be mounted on an elevated tracking system and achieve a minimum ground clearance of 1.0 m when fully tilted and a maximum ground clearance of approximately 2.0 m when horizontal. The Power Conditioning Units (also referred to as inverters) are expected to be elevated on steel framed platforms that will not impede the movement and dispersal of flood waters at the site.

It is proposed that two (2) large raised earth pads/benches will be constructed for the substation/battery storage and terminal station areas in order to meet the flood level freeboard requirements. Each raised pad is approximately 5-6 hectares in area and is expected to be built up approximately 1.0 m above natural ground level. The Watertech report modelled this “developed” conditions scenario to understand any off-site flooding impacts and concludes that the project is not expected to significantly change the flow of floodwater across property boundaries.

For rare riverine flood events, inundation can last for up to a week, and the solar farm structures will have to be designed to withstand such periods of time inundated by flood water.

The Watertech reports sets out recommendations to mitigate flood risk which have been incorporated into the Project EMF.

Agricultural productivity of the land

Cumbre Consultants prepared the *Agricultural Land Quality and Productivity Assessment:* report which assessed the quality and productive potential of the agricultural land at the project site (see Appendix 10).

The Cumbre report concludes that the site is not “high” quality agricultural land and that it has “moderate” agricultural productivity potential. It is less productive than areas of the region or State with the potential for “high” agricultural productivity (i.e. areas with higher average rainfall and soils with less adverse characteristics that do not inhibit plant grant growth as much as on this site). Moderate levels of agricultural production are possible at the site with specialist management practices. However, the heavy clay soils on site are rated as Poor, have a low capacity to facilitate cultivation. These soils are recommended for low disturbance agriculture such as grazing or perennial horticulture.

The broader farm enterprise, Terrick Terrick Station, encompasses 4,000 ha and has 2,200 ewes and progeny and crops 800 hectares for grain annually. The ewes and their progeny are run on dryland Lucerne, irrigated Lucerne, sub and ryegrass pastures and cereal stubbles. The farm enterprise also ran a dairy on the irrigated land to the west of the project site, which at its peak ran 700 cows, but the dairy is now decommissioned and the irrigated area used solely for sheep production.

The Cumbre report calculated that the 950 ha core development area can potentially carry 3.5/ha Dry Sheep Equivalent (DSE) in an average rainfall year, and up to 5 DSE/ha in the best 10% of rainfall years. DSE is a standard unit frequently used in Australia to assess the potential carrying capacity for grazing at a site. Much higher stocking rates can be achieved in other areas of the State. For example Hamilton in South West Victoria has an average rainfall of 835 mm per year and the EverGraze pasture system project maintained stocking rates of 25-31 DSE/ha over the years 2006-2010.

The Cumbre report provided estimates on potential water limited yield of wheat production at the project site. The site has the potential to produce 2.64 tonnes of wheat per hectare in an average rainfall year. As way of comparison, within the Wimmera region of Victoria, which is considered to be a key wheat growing area of the State, the average wheat yield over the last five seasons was 3.8 tonnes per hectare. In the south-west of Victoria which has over double the average annual rainfall than the project site, the average wheat yield over the last five seasons was 5.52 tonnes per hectare.

The project site is located on the eastern edge of the Loddon Valley Irrigation area and is not on soils that are well suited to irrigation. The core development area is not irrigated and is approximately 4 km from Goulburn Murray Water’s (GMW) Channel No. 3/1. Private irrigation was once in use on the site but this was discontinued given the site’s constraints and the water loss associated carrying the water 4km from the GMW channel. The establishment of a solar farm on this site has minimal potential impact on the use of irrigated agriculture infrastructure at a Shire scale. Also, from a water use perspective, water that could be allocated currently to the project site for agricultural purposes, would have greater potential and less environmental risk, if used on soils of greater agricultural productive potential and less risk, that are closer to a supply channel (so involving less water loss). The site is not irrigated by the existing owners, due to its low productive potential inefficiencies associated with transport of water to the site for

sub-optimal outcomes.

Landscape and Visual Impact

SMEC prepared the *Landscape & Visual Impact Assessment: Prairie Solar Farm* report which provides a detailed assessment of the existing landscape and visual values for the study area. The report assesses the potential for landscape and visual impacts, including glare/glint impacts that may arise from the Prairie Solar Farm.

Landscape impacts

The SMEC report concludes that the proposed Prairie Solar Farm has the potential to result in **Minor** direct impacts to the landscape character of the Agricultural Plains landscape character type within which the project is located, and **Negligible-to-minor** indirect impacts to the adjacent Bushland Reserves and Towns and Settlements landscape character types.

The height of the PV panels at up to 3.0-4.0 m will mean that the views of the solar farm are likely only at close range where no screening vegetation is present (i.e. – along the site's northern boundary). At a broader landscape scale, the PV panels and associated substation and terminal station are barely perceptible towards the periphery of the viewshed (i.e. the extent of the zone of theoretical visual influence). At close range, the PV panels and associated infrastructure will have a clearly evident change in landscape characteristics, however the extent of this considerable change is considered minor in relation to the expansive extent of the Agricultural Plains landscape character type.

The SMEC report concludes that the solar farm infrastructure is considered to be of a scale and form that is commensurate with the existing built form typology of the rural landscape and can be adequately absorbed by the landscape.

Visual impacts

Potential visual impacts of the proposed Prairie Solar Farm have been assessed from eight (8) representative public viewpoints. The potential visual impacts at the eight (8) viewpoint locations range from **No impact** through to **Minor-to-moderate.** The greatest levels of impact are expected from viewpoints in close proximity to the project site, where the PV panels will occupy the greatest proportion of the horizontal field of view, and where the PV panels themselves will form clearly discernible elements within a given view.

The SMEC report identified Viewpoint 3 (assessed as **Minor-to-moderate)** as the location where the most significant visual impact associated with the project is expected to occur. This viewpoint is located on Bendigo-Pyramid Road along the northern boundary of the project site (taken approximately 15 m from the proposed PV panels). It is considered representative of the most significant views towards the solar farm from the road. Given the proximity of this viewpoint to the proposed solar farm, the PV cells and associated infrastructure would form clearly discernible elements within the view under most conditions and would provide some level of contrast with the existing agricultural character.

Cumulative impacts

The SMEC report assessed the potential for local and regional scale cumulative impacts to be experienced is **Negligible.** Given the absence of approved or operational solar farms within the region (none are located within 55 kms) there is little risk that there will be frequent or continual visual presence of solar farms within the landscape. The SMEC report concludes therefore that it is unlikely that the way in which the landscape is currently experienced would be fundamentally altered by the proposed Prairie Solar Farm.

Glare impacts

The SMEC report assessed the potential for glare resulting from the PV panels. The SMEC report concludes that there is **Nil** risk of glint and glare related impacts being experienced by receptors identified in their report as a result of the project. The glare analysis calculated **zero** minutes or 'no glare' predicted upon the any of the receptors within the study area.

Fundamentally, PV panels are designed to absorb light in order to maximise energy production, and accordingly reflect only a minimal portion of the sunlight that falls on them. Reflectance levels associated with PV panels are typically much less than those of other common materials in the landscape including steel, paint and standard glass (such as that found in a car windscreen).

The proposed use of a tracking system means that for the most part, the angle of reflectance from the photovoltaic cells will be relatively close to perpendicular to the surface of the cell itself. At times when the tracking system has reached the limit of its range of movement and the angle of incidence shifts away from the perpendicular (i.e. at sunrise and sunset) the reflected light is expected to be reflected up and away from the ground. It is therefore assumed that, relative to ground level, reflected light will typically be reflected up and away from the ground at or near to a minimum of 30 degrees relative to the horizontal.

1.15 Is this action part of a staged development (or a component of a larger project)?

No

1.16 Is the proposed action related to other actions or proposals in the region?

No

Section 2 - Matters of National Environmental Significance

Describe the affected area and the likely impacts of the proposal, emphasising the relevant matters protected by the EPBC Act. Refer to relevant maps as appropriate. The interactive map tool can help determine whether matters of national environmental significance or other matters protected by the EPBC Act are likely to occur in your area of interest. Consideration of likely impacts should include both direct and indirect impacts.

Your assessment of likely impacts should consider whether a bioregional plan is relevant to your proposal. The following resources can assist you in your assessment of likely impacts:

• Profiles of relevant species/communities (where available), that will assist in the identification of whether there is likely to be a significant impact on them if the proposal proceeds;

• Significant Impact Guidelines 1.1 – Matters of National Environmental Significance;

• Significant Impact Guideline 1.2 – Actions on, or impacting upon, Commonwealth land and Actions by Commonwealth Agencies.

2.1 Is the proposed action likely to have ANY direct or indirect impact on the values of any World Heritage properties?

No

2.2 Is the proposed action likely to have ANY direct or indirect impact on the values of any National Heritage places?

No

2.3 Is the proposed action likely to have ANY direct or indirect impact on the ecological character of a Ramsar wetland?

No

2.4 Is the proposed action likely to have ANY direct or indirect impact on the members of any listed species or any threatened ecological community, or their habitat?

Yes

2.4.1 Impact table

Species	Impact
Natural Grasslands of the Murray Valley Plains	Patches of Plains Grassland (EVC 132) that

Species	Impact
	meet the condition threshold to be considered a low diversity version of the EPBC Act-listed flora community: Natural Grasslands of the Murray Valley Plains (NGMVP). A total of 36.08 ha of NGMVP was recorded within the study site. The proposed development will result in the removal of 0.7 ha of the NGMVP community. The GHD report concludes that the project will not result in a significant impact to the NGMVP community. A detailed assessment against the Ministerial Guidelines 1.1 - Matters of National Environmental Significance is provided in Table 6 of the GHD report. Notwithstanding this, Pacific Hydro has completed an assessment of alternative alignments for the proposed transmission line extension to determine whether the removal of Plains Grassland, Plains Woodland, and the EPBC-listed Natural Grasslands of the Murray Valley Plain can be avoided. The assessment considered alternative alignments on freehold land adjacent to West Road and Pentreaths Road. These alternative alignments are not feasible, primarily because land west of Cunneens Road and north of McCreas Road is under the ownership of a separate landholder, who Pacific Hydro has been unable to contact despite numerous attempts to discuss the project. Delivery of an alternative transmission line alignment is therefore not possible. In addition, it appears from an extensive desktop review of the ecological values in the area that the alternative alignments would likely result in similar or greater impacts to the proposed alignment along McCreas Road. Alternative alignments along either West Road or Pentreaths Road would likely result in impacts to DELWP Current mapped wetlands. The current design avoids impact to DELWP Current mapped wetlands.
Seasonal Herbaceous Wetlands (Freshwater) of the Temperate Lowland Plains	Patches of Wetland Formation (EVC 74) currently meet the condition thresholds for the EPBC Act-listed Seasonal Herbaceous Wetlands (Freshwater) of the Temperate Lowland Plains (SHWTLP). The project avoids impact to the wetlands.

Species	Impact
South-eastern Long-eared Bat (Vulnerable)	The EPBC Act-listed (Vulnerable) South-eastern Long-eared Bat (SELE Bat) is considered possible to occur at the project site. The project site is located on the edge of the species range. If the species is present, it is likely to utilise vegetation along Bullock Creek. Suitable habitat is present within the project site within the treed sections, especially along Bullock Creek and within several isolated patches of Black Box. Potential impacts are restricted to the proposed removal of 10 hollow bearing Black Box trees (seven trees within patches and three scattered trees), and encroachment into the tree protection zones of trees within patches along the proposed transmission line extension. Generally, these trees are isolated, surrounded by wheat cropping and sheep grazing, and therefore lacking a shrubby understorey. Given the SELE Bat species forages for non-volant prey, assumed to be obtained from gleaning as it forages in the understorey, the degree to which such trees are utilised is expected to be limited due to the lack of understorey. The most suitable habitat within the project site is located along Bullock Creek. This habitat is largely avoided by the project. With appropriate management (i.e. pre-clearance surveys), impacts to the SELE Bat, if present, are expected to be minor. The GHD report concludes that the project is unlikely to result in a significant impact to the SELE Bat or its habitat. A detailed assessment against the Significant Impact Guidelines 1.1 - Matters of National Environmental Significance is provided in Appendix L of the GHD report.

2.4.2 Do you consider this impact to be significant?

No

2.5 Is the proposed action likely to have ANY direct or indirect impact on the members of any listed migratory species, or their habitat?

No

2.6 Is the proposed action to be undertaken in a marine environment (outside Commonwealth marine areas)?

No

2.7 Is the proposed action to be taken on or near Commonwealth land?

No

2.8 Is the proposed action taking place in the Great Barrier Reef Marine Park?

No

2.9 Is the proposed action likely to have ANY direct or indirect impact on a water resource related to coal/gas/mining?

No

2.10 Is the proposed action a nuclear action?

No

2.11 Is the proposed action to be taken by the Commonwealth agency?

No

2.12 Is the proposed action to be undertaken in a Commonwealth Heritage Place Overseas?

No

2.13 Is the proposed action likely to have ANY direct or indirect impact on any part of the environment in the Commonwealth marine area?

No

Section 3 - Description of the project area

Provide a description of the project area and the affected area, including information about the following features (where relevant to the project area and/or affected area, and to the extent not otherwise addressed in Section 2).

3.1 Describe the flora and fauna relevant to the project area.

The GHD report *Flora and Fauna Assessment: Prairie Solar Farm* provides a detailed account of the ecological values present at the site (see Appendix 6). Based on field assessments of the site conducted on 20 November 2017, 8 February 2018, and 27 March 2018, the GHD report observed the following:

Flora

- The land is mostly cleared for cropping and grazing and is in a highly modified condition dominated by introduced vegetation (predominantly pasture grasses), with a small number of isolated scattered trees and patches of remnant vegetation.- Various patches of native vegetation are present across the site, particularly along Bullock Creek and smaller patches of native grassland are present within the proposed transmission line extension and in paddocks and road reserves.- Patches of native vegetation comprising four different Ecological Vegetation Classes (EVCs) were identified across the site, as follows:-- EVC 74 – Wetland Formation-- EVC 132 – Plains Grassland-- EVC 803 – Plains Woodland-- EVC 823 – Lignum Swampy Woodland - Plains Grassland (EVC 132) within the study site meets the criteria for the associated FFG Act listed Northern Plains Grassland Community. Given the history of disturbance at the site, the vegetation present is not considered to represent a high quality example of this community. - A total of 138 native trees were recorded including Scattered Trees (Small and Large Trees) and Canopy Trees (Large Trees only) within or adjacent to the proposed construction footprint.- Two EPBC-listed flora communities were identified at the project site:-- Patches totalling 35.62 ha of the low diversity form of *Natural Grassland of the Murray Valley Plains* (NGMVP) flora community which is associated with EVC132 - Plains Grassland.-- Seasonal Herbaceous Wetlands (Freshwater) of the Temperate Lowland Plains which is associated with the two patches of EVC74 - Wetland Formation.-- All of these areas have a history of disturbance, including regular cropping (wheat) and grazing (merino sheep).- A total of 34 introduced species were recorded. One weed species, African Box-thorn, is regarded as a Weed of National Significance (WoNS), and six (6) species are regarded as noxious weeds.

Wetlands

Three (3) wetlands identified by DELWP as “mapped Current wetlands” are located within the project site:

- Wetland 44725 is located in the north eastern portion of the site and has an area of 14.97 ha.

- Wetland 44724 is located in the south eastern portion of the site and has an area of 35.24 ha.

- Wetland 44800 partially intersects with the site on the western boundary of the core development area.

Fauna

- Eleven fauna species were observed at the site including nine birds (all native), two non-native mammals and one native reptile.

- Five threatened fauna species were considered to have the potential to utilise habitat within the project site: South-eastern Long-eared Bat, Grey-crowned Babbler, Brolga, Diamond Firetail and Hooded Robin.

- The South-eastern Long-eared Bat which is listed as Vulnerable under the EPBC Act is considered possible to occur at the site. It has a scattered distribution in Victoria known from only four geographic locations all from the north-west of the state. The species has previously been recorded along Bullock Creek approximately 11 kms north of the project site.

-- Many of the scattered Eucalypt trees present at the site are large and with hollows, which may provide habitat for threatened fauna species such as the South-eastern Long-eared Bat though their suitability for this species in particular is reduced by the lack of shrubby understorey.

-- Woodland patches within the Bullock Creek Crown land area also offers suitable habitat for the EPBC-listed South-eastern Long-eared Bat.

3.2 Describe the hydrology relevant to the project area (including water flows).

The site is located on a floodplain that is prone to large flooding events that completely inundate the site and surrounding areas. The most recent large flood event was in 2011 which resulted in floodwaters reaching depths of up to 1.0 m at certain locations within the project site (see Appendix 8 – Surface Water Assessment).

Bullock Creek is a narrow and shallow creek that flows through the project site from south to north. It starts below Ravenswood in Central Victoria at an elevation of 285m AHD and flows north 173km to merge with Pyramid Creek near the Flannery Nature Conservation Reserve approximately located 35 kms north of the project site.

The project site is not located within a Prescribed Water Supply Catchment as defined under the

Catchment and Land Protection Act 1994.

The site is located within the Murray and Western Plains policy area under the *State Environment Protection Policy (Waters of Victoria).*

3.3 Describe the soil and vegetation characteristics relevant to the project area.

The geology of the broader Loddon basin is alluvial clays, silts and sands laid down by prior stream flows.

The soils at the project site are shallow clay loams over clay with two small areas of loam soils, and generally of poorer quality for agricultural uses.

3.4 Describe any outstanding natural features and/or any other important or unique values relevant to the project area.

National and State Parks and Conservation Areas

Mt Terrick Terrick National Park (known locally as Mitiamo Rock) is a low granitic outcrop rising 95 m above the flat riverine plains, located approximately 4.0 kms north of Mitiamo township. Within Terrick Terrick National Park there is a camping area, attracting visitors for short walks and nature studies, and there are impressive views of the surrounding plains from Mt Terrick Terrick.

There are a number of bushland reserves, conserving areas of remnant native vegetation in the broader area which are associated with waterways including Bullock Creek and Bendigo Creek.

3.5 Describe the status of native vegetation relevant to the project area.

- Patches of native vegetation comprising four different Ecological Vegetation Classes (EVCs) were identified across the site, as follows:

-- EVC 74 – Wetland Formation

-- EVC 132 – Plains Grassland

-- EVC 803 – Plains Woodland

-- EVC 823 – Lignum Swampy Woodland

- Plains Grassland (EVC 132) within the study site meets the criteria for the associated FFG Act listed Northern Plains Grassland Community. Given the history of disturbance at the site, the

vegetation present is not considered to represent a high quality example of this community.

- A total of 138 native trees were recorded including Scattered Trees (Small and Large Trees) and Canopy Trees (Large Trees only) within or adjacent to the proposed construction footprint.

- Two EPBC-listed flora communities were identified at the project site:

-- Patches totalling 35.62 ha of the low diversity form of *Natural Grassland of the Murray Valley Plains* (NGMVP) flora community which is associated with EVC132 - Plains Grassland.

-- Seasonal Herbaceous Wetlands (Freshwater) of the Temperate Lowland Plains which is associated with the two patches of EVC74 - Wetland Formation.

-- All of these areas have a history of disturbance, including regular cropping (wheat) and grazing (merino sheep).

3.6 Describe the gradient (or depth range if action is to be taken in a marine area) relevant to the project area.

The site is generally flat with slopes not exceeding 5 per cent (see Figure 4 - Terrain Slope plan).

3.7 Describe the current condition of the environment relevant to the project area.

The project site is located within a broader landscape that is characterised by very flat riverine plains which have been largely cleared, with pockets of remnant vegetation along creek lines. The elevation of the site rises gently from the north to south, ranging from approximately 98 m AHD in the north of the site to approximately 104 m AHD in the south.

The project site is located within the Victorian Riverina bioregion and the Loddon River basin, and has annual rainfall of about 420 mm.

3.8 Describe any Commonwealth Heritage Places or other places recognised as having heritage values relevant to the project area.

There are no places with post-contact heritage values relevant to the project area.

3.9 Describe any Indigenous heritage values relevant to the project area.

The project site intersects with an area of Cultural Heritage Sensitivity (CHS) as defined in the *Aboriginal Heritage Act 2009*, which extends 200 m either side of Bullock Creek (See Figure 3 – Existing conditions plan).

EHP consultants are currently preparing the Cultural Heritage Management Plan (CHMP) for the project. A Desktop-level and Standard-level assessment which involves a comprehensive walk-over of the site has been completed, with Complex-level sub-surface testing due to be concluded shortly.

The results of the Desktop-level assessment are summarised below:

- The nearest registered site is VAHR 7725-0027 which comprises of a scarred tree located approximately 1.3 km south of the site.

- The heritage site types most likely to occur at the project site are scarred trees, stone artefact scatters and isolated artefacts. Other heritage site types likely to occur are Aboriginal burials. Site types considered unlikely to occur in the activity area are mounds, quarries, stone arrangements, shell middens and stony rises.

- The clay soils present at the project site would have supported vegetation that could be used for food or, alternatively, would have attracted fauna to the area. The clay soils may also have been utilised as a resource, perhaps providing pigment for ceremonial decoration or being formed into clay ball heat retainers for ovens.

- The numerous watercourses in the region would have provided access to both water and food resources, making this an attractive region for occupation by Aboriginal people.

3.10 Describe the tenure of the action area (e.g. freehold, leasehold) relevant to the project area.

The proposed land use and development occurs across a total of 54 land parcels, 18 of which are designated unreserved Crown land (see attached file titled "Prairie - Description of lot number and title").

The project site is comprised of a combination of freehold land parcels within the core development area and the transmission line extension, Bullock Creek Water Frontage (Crown land), and various unused Government Roads (also designated as Crown land). The freehold land parcels are under the ownership of two registered owners made up of members of a single family. DELWP is the Public Land Manager for the Crown land parcels and unused Government roads.

3.11 Describe any existing or any proposed uses relevant to the project area.

The land has been historically used for pastoral purposes including cropping and grazing of sheep and cattle. The property is currently utilised for broadacre grazing of merino sheep.

The land is not currently irrigated and is not planned to be in the future. It was irrigated over 5-6 years ago for 3-4 years only and according to the landholder it was decided that utilising that land for irrigation was not the most efficient use of water. A 4.5 km long private north-south

irrigation channel was constructed near the western boundary of the core development area. This channel still remains but is no longer utilised (see Figure 3 – Existing conditions plan). An irrigation boom was previously used to irrigate the site but has subsequently been sold.

Section 4 - Measures to avoid or reduce impacts

Provide a description of measures that will be implemented to avoid, reduce, manage or offset any relevant impacts of the action. Include, if appropriate, any relevant reports or technical advice relating to the feasibility and effectiveness of the proposed measures.

Examples of relevant measures to avoid or reduce impacts may include the timing of works, avoidance of important habitat, specific design measures, or adoption of specific work practices.

4.1 Describe the measures you will undertake to avoid or reduce impact from your proposed action.

The project has undergone multiple design iterations to respond to the constraints identified by the various background studies completed for the project and to matters raised through consultation with local community, State agencies and Loddon Shire Council.

The rationale behind the proposed concept designs is to optimise the use of the land for a solar farm facility while avoiding and minimising on-site ecological and cultural heritage values and off-site impacts such as visual impacts and traffic impacts.

Pacific Hydro has progressively amended the layout of infrastructure to minimise the potential for environmental impacts, as follows:

- Identifying 11 potential vehicular creek crossing locations across Bullock Creek that do not require native vegetation removal. Approximately five (5) creek crossing are likely to be required for the construction and ongoing operation of the solar farm.

- Excluding the proposed vehicular creek crossings, the concept design avoids siting solar farm infrastructure within the Bullock Creek waterway and riparian zone.

- Avoiding impact to the three (3) mapped Current wetlands (DELWP) located within the project site by implementing a minimum 20 m no-go buffer around each mapped wetland and locating all infrastructure outside of this buffer.

- Avoiding impact to scattered trees that are in close proximity to each other and/or close to Bullock Creek, and to focus any required removal of native vegetation on isolated scattered trees.

- Avoiding impacts to large patches of roadside native vegetation by shifting the proposed 40 m

wide transmission line extension corridor 5.0 m further south of the McCreas Road road reserve.

- Allowing space for revegetation/screening to be planted (if required) by ensuring a 10 m wide buffer along the full length of the land adjacent to Bendigo-Pyramid Road. All solar farm infrastructure (including access tracks) is proposed to be located outside of this 10 m wide buffer.

- Significant reduction of native vegetation proposed for removal within the 40 m wide transmission line easement was achieved by applying the following vegetation management rules:

-- Retention of all native grasses and trees less than 3.0 m in height within the 40 m wide easement that are not impacted by the construction of the proposed transmission towers and 4.0 m wide maintenance track under the proposed transmission line.

- Identification of five potential vehicular creek crossings locations across Bullock Creek which avoid impacts to both native vegetation and Aboriginal cultural heritage.

The final concept design is provided in Figure 5 (Project layout plan). The footprint for the proposed transmission line extension is provided in Figure 3 (Vegetation removal and retention plan) of the attached GHD report *Flora and Fauna Assessment: Prairie Solar Farm* (see Appendix 6).

Environmental Management and Monitoring Plans

To ensure best-practice environmental management during construction and operation phases of the Prairie Solar Farm, and the project will incorporate and implement a Construction and Environmental Management and Monitoring Plan (CEMMP) and an Operational and Environmental Management and Monitoring Plan (OEMMP) for these phases respectively. The CEMMP and OEMMP will contain a series of Environmental Management and Monitoring Plans (EMMPs) relevant to each phase. The detailed EMMPs will be prepared and implemented in accordance with the Project Environmental Management Framework (EMF) that Pacific Hydro proposes for the project (see Appendix 5) and any relevant planning permit conditions.

The Project EMF sets out the list of detailed EMMPs that are anticipated to be required for the project and the relevant matters and mitigation measures that should be addressed at a minimum. The Project EMF incorporates the mitigation measures recommended in the specialist background reports prepared for the project. The Project EMF requires the following detailed EMMPs to be prepared:

- Water Quality Management Plan (including stormwater management, sedimentation and erosion prevention, hazardous chemicals)

- Noise Management Plan

- Traffic Management Plan / Detailed Traffic Impact Assessment Report

- Fire and Emergency Management Plan

- Native Vegetation Management Plan

- Pest Management Plan

- Heritage Management Plan

- Site Rehabilitation Plan

Flora and Fauna

The GHD report sets a number of detailed mitigation measures that the project should be implemented during construction and operation of the facility to minimise direct and indirect impacts on flora and fauna. The mitigation measures are summarised as follows:

- Establish no-go-zones around native vegetation proposed to be retained near construction areas. Implement measures to minimise construction footprint as far as practicable.

- Ensuring qualified ecologist is present during removal of hollow-bearing trees to conduct salvage of fauna species.

- Ensuring woody debris is retained on site at the edge of the construction footprint.

- Trees removed should be kept on site to create coarse woody debris.

- Incorporate adequate weed, disease and pest control measures to prevent the spread and/or introduction of new weeds, diseases or pests to the site.

All the recommended mitigation measures set out in the GHD report have been included in the Project EMF that has been prepared for the project (see Appendix 5).

Aboriginal cultural heritage

The CHMP currently under preparation will contain management protocols to ensure the protection of known and unknown Aboriginal cultural heritage during construction and operation of the project.

It is expected that measures to be implemented during construction to avoid and minimise impacts to cultural heritage and ensure compliance with the *Aboriginal Heritage Act 2006* are likely to involve, but are not limited to, the following:

- Minimise construction impacts as far as practicable within the designated area of Cultural Heritage Sensitivity, which extends 200 m either side of Bullock Creek

- Establishment of appropriately designed no-go-zone fencing to avoid impacts to identified heritage sites

- Representatives of the RAP will undertake periodic inspections during initial ground disturbing activities associated with the construction of creek crossings and those access tracks that require stripping back of topsoil or deeper excavation.

A requirement to implement the protocols/requirements of the CHMP (yet to be approved) has been included in the Project EMF that has been prepared for the project (see Appendix 5).

Traffic impacts

The Jacobs report makes a series of recommendations to minimise impacts to the surrounding road network, and are summarised as follows:

- Any upgrades to nearby roads (if required) will be determined at detailed design stage when a haulage contractor has been appointed and finer details of the proposed solar farm have been determined (i.e. construction approach, methodology, and schedule). This will be assessed through the preparation of a detailed Traffic Management Plan (TMP)

- The condition of public roads to be used for the delivery of materials should be established prior to commencement of works and then regularly monitored during the period of the works.

- The detailed TMP will:

-- Assess the sufficiency of all intersections along the preferred transport routes, to determine if any mitigating works or upgrades are required to accommodate the delivery vehicles.

-- Depict all project transport routes. These routes will be on roads that are acknowledged to be fit for purpose, and avoid roads that represent potential road safety risks due to increased heavy vehicle movements.

-- Include the operating hours and speed limits for oversize vehicles and other heavy vehicles on routes accessing the site so as to avoid interference with the passage of school buses, and to provide for resident safety and the safe management of stock.

-- Establish effective and regular communication methods to discuss transport schedules, changing road conditions and address any social issues.

The recommendations of the Jacobs report have been included in the Project EMF that has been prepared for the project (see Appendix 5).

Flood and drainage

For rare riverine flood events, inundation can last for up to a week, and the structures will have to be designed to withstand such periods of time inundated by flood water. The Watertech reports sets out recommendations to mitigate flood risk, which are summarised as follows:

- Ensure rack heights are sufficient to have panels above flood levels.

- Consider footings to stabilise the racks during flood events.

- Cabling and other infrastructure will have to be resilient to high floodwaters that could remain for up to a week.

- To mitigate potential erosion beneath solar panels from extended rainfall grass beneath the panels should be well maintained or that a buffer strip is placed after the most downgradient row of panels.

- The substation, battery storage area, O&M building, PCUs/inverters, and terminal station should be raised above the 1% AEP flood levels.

- A 300 mm freeboard should be applied on top of the 1% AEP flood level when setting the floor level of the platforms under the PCUs.

- Manage construction activities (e.g. vehicle crossings) to avoid initiating stream bed incision.

- Works on the site must be designed to not obstruct floodwaters.

- Incorporate appropriate drainage arrangements for all track crossings.

- Ensure that suitable erosion control measures are implemented to prevent sediment generated from construction activities either entering the waterway or moving downstream.

- Generally, all vehicle/track crossings should be aligned so that the crossings are aligned perpendicular to the main stream flow path where practicable.

- Works on Waterway permit or other approval from North Central CMA may be required for works on Bullock Creek.

- Goulburn Murray Water and Loddon Shire Council will need to be consulted regarding any proposed upgrade of the bridge over the public irrigation channel (Channel 3/1) along McCreas Road.

- Management of sedimentation issues should be a specific requirement of the environmental management plan for the site.

- The management of chemicals stored on-site, used as cleaning and maintenance solvents for the panel areas must be stored and treated on-site to prevent contamination of groundwater and the Bullock Creek system.

The recommendations of the Watertech report have been included in the Project EMF that has been prepared for the project (see Appendix 5).

Landscape and visual impact

The SMEC report sets out a number of suggestions listed below:

On-site mitigation

No specific on-site mitigation measures recommended. If required however, on-site mitigation should focus upon screening the PV cells as well as the smaller scale elements such as substations and ancillary buildings. Continuous buffer planting along the boundary of the solar farm adjacent to the sensitive receptors is considered an adequate measure to screen the PV panels from external view. Additionally, ancillary building should wherever possible be constructed in an architectural style which reflects the overriding vernacular of the rural landscape.

Off-site mitigation

No specific off-site mitigation measures are recommended. However, viewpoints that may warrant off-site mitigation include nearby residential dwellings with direct views towards the solar farm, from which views cannot be adequately screened by screen planting within the boundary of the solar farm itself. The most effective screening method would be to employ on-site boundary screening within the project site itself, and off-site screening should only be employed where this is not feasible or adequate. Here, mitigation should be focused in locations where sensitive receptors are expected to experience views frequently or for long durations, such as from dwellings or outdoor gathering/entertaining spaces. Consultation with land owners will be required to determine the extent to which off-site mitigation may be required.

Mitigation for glare

No specific glare mitigation measures are recommended. Dwellings, roads and the train line within viewing sight of the PV panels, based upon the analysis, are unlikely to experience solar glare. Should mitigation for potential glare be required however, the vegetation screening suggested above is considered adequate. By eliminating a direct line of sight to the PV panels, any potential glare is also screened.

As the SMEC report does not contain any specific recommendations to mitigate potential landscape, visual and glare impacts, no specific measures have been included in the Project EMF that has been prepared for the project. Notwithstanding this, the Project EMF includes a general requirement to ensure the long term health and longevity of native revegetation, including for screening that may be required throughout the life of the project.

Bushfire risk

The Project EMF that has been prepared for the project includes a requirement to prepare and implement a Fire and Emergency Management Plan (FEMP) (see Appendix 5). The FEMP must be prepared in consultation with the CFA to ensure appropriate fire prevention and fire-fighting measures are in place at all times during construction and operation of the solar farm facility.

In addition, Pacific Hydro will continue to work closely with CFA officers as they further develop the draft *Guidelines for Renewable Energy Installations* and progress them to a final version to be adopted by the CFA. Pacific Hydro will make all reasonable efforts to ensure the requirements of the draft Guidelines are implemented into the project design, subject to agreement with the requirements contained in the final approved version.

Weed infestation

The GHD report makes the following recommendations in relation to the spread and/or importation of weeds:

The project should incorporate weed, disease and pest control measures to prevent the spread of existing and/or introduction of new weeds, diseases or pests to the site.

The recommendations of the GHD report have been included in the Project EMF that requires a detailed Pest Management Plan (PMP) to be prepared and implemented during construction

and operation (see Appendix 6).

Approval Approach

As the project is currently in the concept design phase, the precise details of the layout, design and specifications of all associated infrastructure has not currently been determined. Detailed design can only commence after a planning permit and other key approvals are granted and the conditions of approval are known. It is likely that final design details and final construction methodologies will be determined after the engagement of a preferred contractor.

Throughout the detailed design process Pacific Hydro will work closely with Loddon Shire Council and referral authorities to develop the detailed drawings and environmental management plans required by the planning approval for the project. Once finalised Pacific Hydro will lodge the detailed drawings and environmental management plans for approval under secondary consent with Loddon Shire Council as the Responsible Authority and seek to discharge all relevant conditions on the planning permit that are required to enable construction to commence.

4.2 For matters protected by the EPBC Act that may be affected by the proposed action, describe the proposed environmental outcomes to be achieved.

The EPBC Act-listed (Critically endangered) Natural Grasslands for the Murray Valley Plains (NGMVP) was recorded within the project site. A total of 0.7 ha of the NGMVP is proposed for removal. Other areas of NGMVP that are proposed to be retained will have appropriate no-go-zone fencing established around them during construction in order to avoid accidental destruction or removal.

The EPBC Act-listed (Critically endangered) Seasonal Herbaceous Wetlands (Freshwater) of the Temperate Lowland Plains (SHWTLP) was recorded within the project site. The project does not propose to remove any SHWTLP. All areas of recorded SHWTLP that are in proximity to the proposed construction footprint will have appropriate no-go-zone fencing established around them during construction in order to avoid accidental destruction or removal.

The EPBC Act-listed (Vulnerable) South-eastern Long-eared Bat (SELE Bat) is considered

possible to occur at the project site. Suitable habitat is present within the project site within the treed sections especially along Bullock Creek and within several isolated patches of Black Box. Potential impacts are restricted to the proposed removal of 10 hollow bearing Black Box trees (seven trees within patches and three scattered trees), and encroachment into the tree protection zones of trees within patches along the proposed transmission line extension. Vegetation patches along Bullock Creek in proximity to the construction footprint will have appropriate no-go-zone fencing established around them during construction in order to avoid accidental destruction or removal.

Section 5 – Conclusion on the likelihood of significant impacts

A checkbox tick identifies each of the matters of National Environmental Significance you identified in section 2 of this application as likely to be a significant impact.

Review the matters you have identified below. If a matter ticked below has been incorrectly identified you will need to return to Section 2 to edit.

5.1.1 World Heritage Properties

No

5.1.2 National Heritage Places

No

5.1.3 Wetlands of International Importance (declared Ramsar Wetlands)

No

5.1.4 Listed threatened species or any threatened ecological community

No

5.1.5 Listed migratory species

No

5.1.6 Commonwealth marine environment

No

5.1.7 Protection of the environment from actions involving Commonwealth land

No

5.1.8 Great Barrier Reef Marine Park

No

5.1.9 A water resource, in relation to coal/gas/mining

No

5.1.10 Protection of the environment from nuclear actions

No

5.1.11 Protection of the environment from Commonwealth actions

No

5.1.12 Commonwealth Heritage places overseas

No

5.2 If no significant matters are identified, provide the key reasons why you think the proposed action is not likely to have a significant impact on a matter protected under the EPBC Act and therefore not a controlled action.

EPBC Act-listed Flora Communities

Significant efforts were made during the development of the concept design to avoid and minimise impacts to the two EPBC-listed flora communities observed at the project site: Natural Grasslands of the Murray Valley Plains (associated with patches of Plains Grassland greater than 1.0 ha) and Seasonal Herbaceous Wetlands (Freshwater) of the Temperate Lowland Plains (associated with the two patches of Wetland Formation. The project avoids impact to both patches of the Seasonal Herbaceous Wetlands (Freshwater) of the Temperate Lowland Plains.

A total of 0.7 ha of the Natural Grasslands of the Murray Valley Plains threatened community is proposed to be removed, which has been reduced down from approximately 7.0 ha through adopting a more sensitive design approach within the proposed transmission line easement. The greatest impact to the community will occur along the proposed transmission line extension between the substation and terminal station, where a 40 m wide easement is to be established. Within the 40 m wide easement some vegetation is required to be removed to allow for the construction of transmission line towers, access tracks for construction and operation/maintenance, and to meet electricity safety requirements.

The GHD report assessed the proposed removal of 0.7 ha of the Natural Grasslands of the Murray Valley Plains against the *Significant Impact Guidelines 1.1 - Matters of National Environmental Significance* (the EPBC Guidelines). While the proposed removal of native vegetation removal will add to incremental losses of this ecological community, it is not expected to result in a significant impact. The detailed assessment against the EPBC Guidelines is contained in Table 6 of the attached GHD report.

EPBC Act-listed South-eastern Long-eared Bat

One EPBC Act-listed fauna species (South-eastern Long-eared Bat) has the potential to occur at the study site. As a result of avoidance and minimisation of impacts to native vegetation within the study site; impacts are expected to be restricted to the following habitat for this species:

- Direct removal of seven hollow bearing Black Box within patches

- Direct removal of three scattered hollow bearing Black Box within cropped paddocks

- Indirect impacts in the form of tree protection zone encroachment of trees within patches

A majority of the impacts at the study site are confined to cropped paddocks and extensive areas of habitat for this species are retained within Bullock Creek. A significant impact to this species is not expected. An assessment of the project against the EPBC Guidelines is provided in Appendix L of the attached GHD report.

Eleven species (all birds) known or predicted to occur within 10 kms of the study site are listed as Migratory under the EPBC Act. It is not expected that migratory species will make substantial use of the site or that works at the study site would result in the impacts on important habitat or on a significant proportion of a population of migratory species.

Section 6 – Environmental record of the person proposing to take the action

Provide details of any proceedings under Commonwealth, State or Territory law against the person proposing to take the action that pertain to the protection of the environment or the conservation and sustainable use of natural resources.

6.1 Does the person taking the action have a satisfactory record of responsible environmental management? Please explain in further detail.

Company profile

Founded in Australia in 1992, Pacific Hydro is a global renewable energy owner, operator and developer. Pacific Hydro has an established record of identification, development, and operation of renewable energy assets, and significant in-house expertise across our international operations. Importantly, Pacific Hydro has never sold any of the assets it has built.

Pacific Hydro operates a high quality, diversified portfolio with an installed capacity of over 880 MW across Chile, Australia, and Brazil:

- Active in Australia since the early 1990s, it now operates over 480 MW of installed wind and hydro capacity.- Operating in Chile since 2002, it has delivered three large-scale run-of-river hydro projects via partnerships.- Since entering the Brazilian market in 2006, it has two operational wind assets and a solid pipeline of projects currently under development.

Pacific Hydro is also developing and constructing a substantial number of projects in Queensland, New South Wales, and Victoria totalling over 2 GW of potential capacity, and has a growing electricity retail business in Australia, Tango Energy.

Pacific Hydro was acquired by the State Power Investment Corporation (SPIC) through its subsidiary, State Power Investment Overseas of China (SPIC Overseas) in January 2016. SPIC is one of the top five power generation groups in China, with $US131 Billion total assets and a total installed capacity that exceeds 120 GW. SPIC operates in the generation, coal, aluminium, logistics, finance, environmental protection, and high technology industries. SPIC has a presence in 36 countries and regions abroad, including Australia, Chile, Malta, Japan, Brazil, Turkey and Vietnam. The recent investment in Pacific Hydro has resulted in priority growth in solar development.

Pacific Hydro’s operating assets in Australia currently abate over 1.2 million tonnes of greenhouse gas pollution every year.

Pacific Hydro has built a strong reputation for engaging with the communities within which it operates and has a track record of collaborating with local communities to deliver lasting, and sustainable benefits.

Environmental Management System

Pacific Hydro has a certified ISO14001:2004 Environmental Management System (EMS) which overarches the management of all operating sites. To retain this certification, Pacific Hydro is required to show a process of review and continual improvement. This requirement is externally audited annually.

With relation to site specific environmental obligations, Pacific Hydro integrates the Environmental Management and Monitoring Plans (EEMPs) approved as part of the planning process, within its overarching EMS through the Environmental Aspects Register which is maintained and monitored by a full-time Environmental Compliance Officer employed by Pacific Hydro.

6.2 Provide details of any past or present proceedings under a Commonwealth, State or Territory law for the protection of the environment or the conservation and sustainable use of natural resources against either (a) the person proposing to take the action or, (b) if a permit has been applied for in relation to the action – the person making the application.

No past or present proceedings.

6.3 If it is a corporation undertaking the action will the action be taken in accordance with the corporation's environmental policy and framework?

Yes

6.3.1 If the person taking the action is a corporation, please provide details of the corporation's environmental policy and planning framework.

Pacific Hydro has a certified ISO14001:2004 Environmental Management System (EMS) which overarches the management of all operating sites.

To retain this certification, Pacific Hydro is required to show a process of review and continual improvement. This requirement is externally audited annually. See attached ISO14001:2004 certification.

See attached Pacific Hydro Health, Safety and Environment Policy.

6.4 Has the person taking the action previously referred an action under the EPBC Act, or been responsible for undertaking an action referred under the EPBC Act?

Yes

6.4.1 EPBC Act No and/or Name of Proposal.

2017/8000 Haughton Solar Farm, Queensland

2012/6542 Keyneton Wind Farm, South Australia

2008/4303 Wind Energy Facility 3km North East of Gulnare, South Australia
2007/3285 Crowlands Wind Energy Facility, Victoria
2005/2357 Run-of River power station - Bandicoot Bar - Kununurra Diversion Dam, Kununurra, Western Australia
2003/933 Wind farm at Rous Head Harbour, Fremantle, Western Australia
2003/925 Yaloak Estate, Ballan, Victoria
2003/1100 Rosedale Ridge, Victoria
2003/1003 Clements Gap Wind Farm, South Australia
2003/1001 Sheoak Flat Wind Farm, Yorke Peninsula, South Australia
2000/18 Portland Wind Farm, Victoria

Section 7 – Information sources

You are required to provide the references used in preparing the referral including the reliability of the source.

7.1 List references used in preparing the referral (please provide the reference source reliability and any uncertainties of source).

Reference Source	Reliability	Uncertainties
Cumbre Consultants 2018. Agricultural Land Quality and Productivity Assessment, prepared for Pacific Hydro.	High	No known uncertainties
Ecology and Heritage Partners (EHP) 2018. Desktop-level Cultural Heritage Management Plan, prepared for Pacific Hydro.	High	No known uncertainties
GHD 2018. Flora and Fauna Assessment: Prairie Solar Farm, prepared for Pacific Hydro.	High	No known uncertainties
Jacobs 2018. Traffic Impact Assessment: Prairie Solar Farm, prepared for Pacific Hydro.	High	No known uncertainties
SMEC 2018. Landscape & Visual Impact Assessment: Prairie Solar Farm, prepared for Pacific Hydro.	High	No known uncertainties
Water Technology (Watertech) 2018. Surface Water Assessment: Prairie Solar Farm, prepared for Pacific Hydro.	High	No known uncertainties

Section 8 – Proposed alternatives

You are required to complete this section if you have any feasible alternatives to taking the proposed action (including not taking the action) that were considered but not proposed.

8.0 Provide a description of the feasible alternative?

There are no feasible alternatives to the project other than the 'do nothing' case.

The project seeks to connect into the National Electricity Market (NEM) and contribute to reaching the greenhouse gas reduction targets in Victoria and Australia.

Given the current project development area avoids impacts to MNES, no alternatives to development at the site were considered.

Design rationale and evolution

The project has undergone several design iterations to respond to the constraints identified by the various background studies completed for the project and to matters raised through consultation with local community, State agencies and Loddon Shire Council.

The rationale behind the concept designs is to optimise the use of the land for a solar farm facility while avoiding and minimising on-site ecological and cultural heritage values and off-site impacts such as visual and traffic impacts.

The three key concept design iterations are summarised below.

Concept design iteration #1

To assess the high level economic viability of the project site, an initial design involved near complete coverage of the core development area with PV panel arrays and associated infrastructure including indicative footprints for the substation and Operations and Maintenance facility.

A 4.5 km long 40 m wide transmission line easement was subsequently identified that extended between the proposed substation in the core development area and the proposed terminal station at the far west of the project site and abutted the southern edge of McCreas Road.

Excluding the proposed vehicular creek crossings, the concept design avoids siting solar farm infrastructure within the Bullock Creek waterway and riparian zone.

Concept design iteration #2

As the concept design progressed and further information became available for this project site, Pacific Hydro progressively amended the layout of infrastructure to minimise the potential for environmental impacts, as follows:

- Avoiding impact to the three (3) mapped current wetlands (DELWP) located within the project site by implementing a minimum 20 m no-go buffer around each mapped wetland and locating all infrastructure outside of this buffer.

- Avoiding impact to scattered trees that are in close proximity to each other and/or close to Bullock Creek, and to focus any required removal of native vegetation on isolated scattered trees.

- Avoiding/minimising impacts to large patches of roadside native vegetation by shifting the proposed 40 m wide transmission line extension corridor 5.0 m further south of the McCreas Road road reserve.

- Allowing space for revegetation/screening to be planted (if required) by ensuring a 10 m wide buffer along the full length of the land adjacent to Bendigo-Pyramid Road. All solar farm infrastructure (including access tracks) is proposed to be located outside of this 10 m wide buffer.

Final concept design

The concept design was further refined to minimise impacts to native vegetation and cultural heritage as follows:

- Identification of a total of 12 potential vehicular creek crossing locations across Bullock Creek, 11 of which do not require native vegetation removal. Approximately five (5) creek crossings will be required for the construction and ongoing operation of the solar farm facility. For the purposes of calculating ‘worst-case’ native vegetation losses that could potentially result from the project, it is assumed that Creek Crossing No. 12 is required to deliver the transmission line extension from the Substation Location (Option #2). Option 2 is currently preferred as it is likely to provide for a straighter transmission line route. Option 1 may require additional transmission line works and additional pole/tower(s). However, through detailed design, if it is determined that the alternative Substation Location Option #1 is preferred, the project may not require the delivery of Creek Crossing No. 12.

- Significant reduction of native vegetation proposed for removal within the 40 m wide transmission line easement was achieved by applying the following vegetation management rules:

-- Retention of all native grasses and trees less than 3.0 m in height within the 40 m wide easement that are not impacted by the construction of the proposed transmission towers and 4.0 m wide maintenance track under the proposed transmission line.

- Identification of five potential vehicular creek crossings locations across Bullock Creek which avoid impacts to both native vegetation and Aboriginal cultural heritage.

8.1 Select the relevant alternatives related to your proposed action.

8.27 Do you have another alternative?

No

Section 9 – Contacts, signatures and declarations

Where applicable, you must provide the contact details of each of the following entities: Person Proposing the Action; Proposed Designated Proponent and; Person Preparing the Referral. You will also be required to provide signed declarations from each of the identified entities.

9.0 Is the person proposing to take the action an Organisation or an Individual?

Organisation

9.2 Organisation

9.2.1 Job Title

Environment & Dev. Manager

9.2.2 First Name

Kim

9.2.3 Last Name

Derriman

9.2.4 E-mail

kderriman@pacifichydro.com.au

9.2.5 Postal Address

Lv 13 700 Collins Street
DOCKLANDS VIC 3008
Australia

9.2.6 ABN/ACN

ABN

56161024755 - PACIFIC HYDRO AUSTRALIA DEVELOPMENTS PTY LTD

9.2.7 Organisation Telephone

(03) 8621 6000

9.2.8 Organisation E-mail

phareception@pacifichydro.com.au

9.2.9 I qualify for exemption from fees under section 520(4C)(e)(v) of the EPBC Act because I am:

Not applicable

Small Business Declaration

I have read the Department of the Environment and Energy's guidance in the online form concerning the definition of a small a business entity and confirm that I qualify for a small business exemption.

Signature:..... Date: .....

9.2.9.2 I would like to apply for a waiver of full or partial fees under Schedule 1, 5.21A of the EPBC Regulations

No

9.2.9.3 Under sub regulation 5.21A(5), you must include information about the applicant (if not you) the grounds on which the waiver is sought and the reasons why it should be made

Person proposing the action - Declaration

I, KIM DERRIMAN, declare that to the best of my knowledge the information I have given on, or attached to the EPBC Act Referral is complete, current and correct. I understand that giving false or misleading information is a serious offence. I declare that I am not taking the action on behalf of or for the benefit of any other person or entity.

Signature:..... Date: 23/8/18.....

I, _____, the person proposing the action, consent to the designation of _____ as the proponent of the purposes of the action describe in this EPBC Act Referral.

Signature:..... Date: .....

9.3 Is the Proposed Designated Proponent an Organisation or Individual?

Organisation

9.5 Organisation

9.5.1 Job Title

Environment & Dev. Manager

9.5.2 First Name

Kim

9.5.3 Last Name

Derriman

9.5.4 E-mail

kderriman@pacifichydro.com.au

9.5.5 Postal Address

Lv 13 700 Collins Street
DOCKLANDS VIC 3008
Australia

9.5.6 ABN/ACN

ABN

56161024755 - PACIFIC HYDRO AUSTRALIA DEVELOPMENTS PTY LTD

9.5.7 Organisation Telephone

(03) 8621 6000

9.5.8 Organisation E-mail

phareception@pacifichydro.com.au

Proposed designated proponent - Declaration

I, KIM DERRIMAN, the proposed designated proponent, consent to the designation of myself as the proponent for the purposes of the action described in this EPBC Act Referral.

Signature:..... Date: 23/8/18.....

9.6 Is the Referring Party an Organisation or Individual?

Organisation

9.8 Organisation

9.8.1 Job Title

Senior Environment and Development Planner

9.8.2 First Name

Matt

9.8.3 Last Name

Stafford

9.8.4 E-mail

mstafford@pacifichydro.com.au

9.8.5 Postal Address

Lv 13 700 Collins Street
DOCKLANDS VIC 3008
Australia

9.8.6 ABN/ACN

ABN

56161024755 - PACIFIC HYDRO AUSTRALIA DEVELOPMENTS PTY LTD

9.8.7 Organisation Telephone

(03) 8621 6000

9.8.8 Organisation E-mail

phareception@pacifichydro.com.au

Referring Party - Declaration

I, MATT STAFFORD, I declare that to the best of my knowledge the information I have given on, or attached to this EPBC Act Referral is complete, current and correct. I understand that giving false or misleading information is a serious offence.

Signature: ..... Date: 23/8/18

Appendix A - Attachments

The following attachments have been supplied with this EPBC Act Referral:

1. appendix_1_-_final_planning_permit_application_form.pdf
2. appendix_2_-_final_land_titles_combined.pdf
3. appendix_3_-_final_ph_consultation_engagement_sustainability.pdf
4. appendix_4_-_final_indicative_concept_drawings.pdf
5. appendix_5_-_final_ph_environmental_management_framework.pdf
6. appendix_6_-_final_flora_and_fauna_assessment_-_optimised.pdf
7. appendix_7_-_final_chmp_notice_of_intent.pdf
8. appendix_8_-_final_surface_water_assessment_-_watertetch.pdf
9. appendix_9_-_final_traffic_impact_assessment_-_jacobs.pdf
10. appendix_10_-_final_agricultural_land_quality_assessment_-_cumbre.pdf
11. appendix_11_-_final_landscape_and_visual_impact_assessment_-_smec.pdf
12. appendix_12_-_final_public_land_manager_consent_-_delwp.pdf
13. appendix_13_-_final_self-assessment_environment_effects_act_1978.pdf
14. prairie_-_description_of_lot_number_and_title.pdf
15. prairie_-_final_planning_assessment_report.pdf