

Title of Proposal - St Patricks Plains Wind Farm, Central Highlands, Tasmania

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 (renewable)

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

The proposed St Patricks Plains Wind Farm is located in the Central Highlands of Tasmania. The project is proposed to have up to 67 turbines, with each turbine generating approximately 3.6 - 6.2 MW per turbine, subject to available technology at the time of infrastructure procurement. However, only up to 300 MW of power generating capacity will be constructed. An indicative layout plan is provided in Attachment 1. The project will be undertaken by Epuron Projects Pty Ltd who have completed the approvals process for a number of wind farm projects in Australia.

There is an existing 60 m meteorological monitoring mast on site and a 120 m high mast has recently been installed at a second location on the project site.

The preliminary details of the turbines and associated specifications are outlined below. These specifications may change during the design process.

Tower height 150 m

Proposed blade length 90 m

Max total height to blade tip 240 m

Ground Clearance 60 m

Hardstand dimensions 40 m x 120 m

Generating capacity 3.6 - 6.2 MW

Each turbine will connect to the switchyard via a network of underground cables. However, the distance between the northern and southern clusters of turbines may necessitate a limited network of overhead powerline(s). All power will be directed to the on-site Palmerston to Waddamana TasNetworks-owned powerlines via a new switchyard to be developed on site. The switchyard will have a footprint of approximately 40,000 m² (4 ha). The electricity generated from the proposed wind farm will allow hydro generators to ramp down during windy periods.

The project will also include:

- A permanent Operations and Maintenance Building and storage area
- A number of permanent wind monitoring masts
- A temporary construction compound with site buildings (toilets, office etc.), laydown areas, car park
- New tracks/roads with all-weather surfacing, 6-12 m wide, with approximately 78 km of road network required. This includes 38 km of new track and the upgrade of 40 km of existing tracks.
- A temporary concrete batching plant for foundation construction.

Road construction material will likely be sourced from a number of quarries. Epuron are in discussion with the owners of a potential source of road material who is currently supplying the nearby Cattle Hill Wind Farm development. Subject to material availability, other sources may be required, with preference given to quarrying opportunities within the project area.

Sewage will be generated during the construction and operation phases, all of which will be contained in temporary facilities and removed from site. All putrescible and construction waste will be removed from site to appropriately licensed facilities.

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
Approximate area of works	1	-42.104910352225	146.84801485308
Approximate area of works	2	-42.102872579782	146.79857637652
Approximate area of works	3	-42.08300086619	146.79994966753
Approximate area of works	4	-42.06363269544	146.78003694781
Approximate area of works	5	-42.054456235941	146.77523042925
Approximate area of works	6	-42.043238762424	146.77385713824
Approximate area of works	7	-42.02079787307	146.80956270464
Approximate area of works	8	-42.010594849753	146.84732820757
Approximate area of works	9	-42.011105039794	146.86243440874
Approximate area of works	10	-42.029469155886	146.86930086382
Approximate area of works	11	-42.048847746788	146.88715364702
Approximate area of works	12	-42.113060787037	146.8850937105
Approximate area of works	13	-42.113570154417	146.89882662066
Approximate area of works	14	-42.122228773563	146.89882662066
Approximate area of works	15	-42.123247356859	146.93521883257
Approximate area of works	16	-42.145142936942	146.95719148882

Area	Point	Latitude	Longitude
works			
Approximate area of	17	-42.206206839797	146.88372041949
works			
Approximate area of	18	-42.192981331063	146.87754060992
works			
Approximate area of	19	-42.183823588114	146.88166048296
works			
Approximate area of	20	-42.179753054297	146.88166048296
works			
Approximate area of	21	-42.175173390521	146.87410738238
works			
Approximate area of	22	-42.174664518518	146.8590011812
works			
Approximate area of	23	-42.14056076748	146.83634187945
works			
Approximate area of	24	-42.128849272283	146.83634187945
works			
Approximate area of	25	-42.117644946092	146.83977510699
works			
Approximate area of	26	-42.105419785102	146.84870149859
works			
Approximate area of	27	-42.104400915254	146.84870149859
works			
Approximate area of	28	-42.104910352225	146.84801485308
works			

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).

St Patricks Plains is located in the Highland Lakes region of Tasmania, south of Great Lake and Arthurs Lake. The nearest locality is Steppes which is 108 km from Launceston and 112 km from Hobart. The project area is located between the Lagoon of Islands wetland and Penstock Lagoon. The site is located on the Highland Lakes Rd, 10 km from Miena to the north, and 24 km from Interlaken to the east. It is approximately 43 km due west of Tunbridge (located on the Midland Highway) and approximately 28 km north of Bothwell following the Highland Lakes Rd.

The site has varied terrain extending from river flats to escarpment areas, with vegetative cover that includes remnant vegetation, forestry and cleared grazing land. Selective logging or clear felling has been undertaken in some areas in the southern part of the site, and plantation forestry is now occurring. Existing native ecosystems within the site are characterised by highland vegetation, including moorland, sedgeland, rushland, peatland and alpine heathland. Interlaken Lakeside Reserve (Crescent Lake), a Ramsar wetland, is located 16 km to the east of

the project area. Lake Crescent is located within the Clyde Catchment whereas the project area is located within the Ouse catchment. There is no connection between the two and no potential for direct or indirect impacts on the Ramsar wetland.

Those land parcels included in the project area are detailed below.

Tasmanian Property Identifier

Title reference

Address

5000093

148905/1

148905/2

241119/1

241119/2

'Christian Marsh' - 5057 Highland Lakes Rd Steppes TAS 7030

5000165

122878/1

'St. Patricks Plains' - 6011 Highland Lakes Rd Steppes TAS 7030

5010136

100080/2

100080/3

205991/1

100081/65

'Allwrights Lagoons' - Penstock Rd Shannon TAS 7030

2813013

156999/1

100672/1

4244a Waddamana Rd Steppes TAS 7030

7936127

126982/1

'The Ripple (North)' - 6300 Highland Lakes Rd Steppes TAS 7030

1780918

126983/1

'The Ripple(South)' - Highland Lakes Rd Steppes TAS 7030

7936135

124603/1

'Ripple Lodge' - 6212 Highland Lakes Rd Steppes TAS 7030

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

10300 ha

1.7 Is the proposed action a street address or lot?

Street Address

Multiple on Highland Lakes Rd

Lakes Rd and Waddamana Rd
Steppes TAS 7030
Australia

1.8 Primary Jurisdiction.

Tasmania

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.

Jacqui Tyson

1.10.1.2 E-mail

planner@centralhighlands.tas.gov.au

1.10.1.3 Telephone Number

(03) 6259 5503

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

Start date 06/2023

End date 06/2053

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

Planning approvals in Tasmania are administered through the *Land Use Planning and Approvals Act 1993*. The site of the proposed wind farm falls within the Central Highlands local government area and is regulated under the Central Highlands Interim Planning Scheme 2015 (the Planning Scheme). Wind farms are classed as Utilities under the Planning Scheme and require lodgement of a development application and a Discretionary level of assessment.

Wind farms with the capacity to generate more than 30 MW of electricity are listed in Schedule 2 of the Tasmanian *Environmental Management and Pollution Control Act, 1994* as a Level 2 activity. Level 2 activities require referral to the Environment Protection Authority of Tasmania (the EPA) and assessment by the Board of the EPA. Any permit issued by the Central Highlands Council must include any conditions provided by the EPA.

Activities requiring assessment by the EPA are eligible for assessment under the bilateral agreement made between the Commonwealth and the state of Tasmania under Section 45 of the EPBC Act. The proponent has chosen this assessment pathway for the proposed action.

The *Nature Conservation Act 2004* (NC Act) lists threatened native vegetation communities in Tasmania. Generally these communities do not directly translate to TECs listed under the EPBC

Act, however, for the purposes of this referral, communities consistent with the species composition and habitat requirements of the TECs have been considered. Offsets may be required if areas of these communities are unavoidably impacted by a development.

The *Threatened Species Protection Act 1995* (TSP Act) identifies those species of flora and fauna considered to be threatened within the state. A Permit to Take is required to disturb these species or their habitats. Many of these species are also listed under the EPBC Act.

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

The proponent, Epuron Projects P/L (Epuron) has already begun stakeholder and community engagement with key communities and individuals. A Stakeholder Engagement Plan has been prepared for the project, and all engagement will be carried out in accordance with the plan. The key objectives of the Stakeholder Engagement Plan are:

- Engage with stakeholders to ensure everyone who needs to know about the proposal, and the process it will follow, is informed-
- Engage with stakeholders to ensure their views and concerns are heard and understood-
- Ensure the team developing the wind farm is aware of all stakeholder issues and concerns, and where possible, addresses these issues/concerns through design-
- Communicate where it has or has not been able to change the design in response to consultation-
- Gather contact details of stakeholders, to enable Epuron to keep stakeholders informed and provide them with opportunities to give feedback and join consultation activities.

The following stakeholder groups have been identified in the Stakeholder Engagement Plan:

- Local government-
- State government, agencies and NGOs-
- Federal government-
- Residents within the project area-
- Neighbouring residents-
- Community members and interest groups.

Six project stages have been identified, and stakeholder specific objectives and engagement methods have been identified for each stage:

- Site selection (already undertaken)-
- Project feasibility (already undertaken)-
- Planning and approvals (currently in phase)-
- Construction-
- Commissioning and operation-
- Decommissioning

To date, Epuron has worked through the first two stages and has:

- met with a number of stakeholders, including EPA, Council, TasNetworks, landowners and neighbours-
- door knocked and left letters and newsletters with residents around the site-
- sent letters to registered addresses of neighbouring residents where residents could not be contacted locally-
- engaged directly (emails and phone calls) with interested stakeholders who have contacted Epuron.

The Stakeholder Engagement Plan is a live document and will be updated as the Project evolves through each phase.

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.

No environmental impact statement (EIS) has been prepared. An EIS is required to be submitted for assessment by the EPA (refer to Section 1.12 above) and the guidelines for the preparation of this have been requested from the EPA. The Commonwealth government's requirements for assessment of the impacts on MNES will be included in the guidelines issued by the EPA.

A wedge-tailed eagle nest search and assessment was conducted in April 2019 by Wildspot Consulting. The following additional environmental studies and surveys have been commissioned and will be undertaken by the specialists notated below for inclusion in the EIS.

- Full natural values assessment (fauna, flora and weeds) (North Barker Ecosystem Services) – August 2019 onwards
- Eagle utilisation survey (North Barker Ecosystem Services) – August 2019 onwards
- Aboriginal heritage survey (Cultural Heritage Management Australia) – September 2019 onwards
- European heritage survey (Cultural Heritage Management Australia) – September 2019 onwards
- Follow-on wedge-tailed eagle nest search and assessment (North Barker Ecosystem Services) – 2020 breeding season
- Noise assessment (Marshall Day Acoustics) – February 2020
- Traffic Impact Assessment (pitt&sherry) – February 2020
- Visual Impact Assessment (Green Bean Design) – November 2019
- Stakeholder mapping and community surveys (Epuron, and pitt&sherry) – ongoing.

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
Alpine Sphagnum Bogs and Associated fens – listed as Endangered	In Tasmania this Threatened Ecological Community (TEC) is generally represented by the Sphagnum peatland threatened native

Species	Impact
	<p>community identified under the NC Act. There is none of this community mapped within the project area and most of this TEC is within Tasmanian wilderness areas within National Parks (Recovery Plan 2016). Other indicator species identified for the TEC include <i>Sphagnum</i> spp., <i>Baloskion australe</i>, <i>Carex gaudichaudiana</i> and <i>Empodisma minus</i> where occurring in alpine and subalpine regions (above 800 m ASL in Tasmania). The following species are also included in the Listing Advice for this TEC as typical native plant species found in alpine sphagnum bogs and associated fens. Shrubs <i>Baeckea gunniana</i> <i>Callistemon viridiflorus</i> <i>Callistemon</i> spp. <i>Epacris</i> spp. <i>Ozothamnus hookeri</i> <i>Ozothamnus rodwayi</i> <i>Richea</i> spp. Herbs <i>Acaena novae-zelandiae</i> <i>Asperula gunnii</i> <i>Brachyscome</i> spp. <i>Celmisia asteliifolia</i> <i>Celmisia saxifraga</i> <i>Gunnera cordifolia</i> <i>Lobelia surrepens</i> Grasses, Sedges, Rushes <i>Astelia alpina</i> <i>Carex</i> spp. <i>Carpha alpina</i> <i>Gahnia grandis</i> <i>Gymnoschoenus sphaerocephalus</i> <i>Isolepis</i> spp. <i>Juncus</i> spp. <i>Lepidosperma filiforme</i> <i>Luzula</i> spp. <i>Oreobolus pumilio</i> <i>Poa gunnii</i> <i>Poa labillardierei</i> <i>Schoenus</i> spp. Ferns and Mosses <i>Blechnum penna-marina</i> <i>Gleichenia alpina</i> <i>Sphagnum australe</i> <i>Sphagnum cristatum</i> <i>Sphagnum falciculatum</i>. These species may be found within the Tasmanian vegetation communities Highland <i>Poa</i> grassland and Highland grassy sedgeland and these have been used as the basis for the mapped extent of the TEC indicated on the map in Attachment 2. A defining characteristic of this TEC is the presence of a peat substratum and this will likely determine the extent of the TEC within the project area. There is the potential for peat to occur within the wider underlying soils. In Tasmania most of this TEC is located within the Tasmanian wilderness areas within National Parks which further reduces the likelihood that it is present on site. There are no condition thresholds adopted for this TEC. The extent of this potential TEC, if any, on site will be confirmed through field survey and where possible it will be avoided. Based on mapping of the two vegetation communities above, a total potential TEC area of 1,736 ha may occur.</p>

Species	Impact
	<p>Turbines are proposed to be located predominantly in areas unconstrained by the TEC, however, six are proposed within the TEC and eight are proposed in close proximity to the approximated boundary of the TEC. The connecting roads and underground powerline connections will result in further disturbance of the TEC. Potential disturbance of 5.5 ha of the TEC for location of turbines, associated roads and powerlines could occur if the extent predicted by mapping equivalent vegetation communities is confirmed on site.</p>
<p>Colobanthus curtisiae Grassland cupflower - Vulnerable Dianella amoena Grassland Flaxlily - Endangered Eucalyptus gunnii subsp. divaricata Miena cider gum - Vulnerable Glycine latrobeana clover glycine - Vulnerable Leucochrysum albicans var. tricolor Grassland paperdaisy - Endangered Prasophyllum crebriflorum Crowded Leek-orchid - Endangered Pterostylis pratensis Liawenee greenhood - Vulnerable</p>	<p>These species share common habitat requirements, namely grasslands, grassy woodlands and some in dry sclerophyll forest, and most have been previously recorded within or adjacent the project area. Vegetation across the project area is shown on Attachment 3 and includes vegetation communities grouped by common characteristics. This is taken from Forest to Fjaeldmark (DPIPWE 2013). The extent of each group is shown and a significant number of the turbines are proposed in areas mapped as woodland and forest. The records of these species are predominantly located in the northern portion of the project area, however, there are no records east of Highland Lakes Rd or south of the Shannon River. There is a fairly even distribution of records of grassland cupflower and Liawenee greenhood across the main turbine area and clusters of crowded leek-orchid and Miena cider gum in the north and south respectively. Detailed site survey will be required to confirm the location of the species within the project area to allow refinement of turbine locations where possible to avoid disturbance. Within the southern portion of the site, although most turbines are proposed within grassland / woodland areas, the records of these species occur outside the areas considered to be suitable habitat. The proposed turbine locations in the very southern portion of the site coincide with known locations of grassland cupflower, and one record of glover glycine. Potential impacts from the proposed action include direct loss of plants and habitat resulting from ground disturbance for turbine construction and installation of associated</p>

Species	Impact
	<p>infrastructure. The total anticipated disturbance footprint of 90 ha is not large in the context of the entire site and each turbine has a footprint of approximately 0.5 ha. However, it is unknown whether the records of these species reflect their true distribution across the site or if they are limited to the extent of restricted observations. Detailed site survey will be required to confirm the location of the species within the project area to allow refinement of turbine locations where possible to avoid disturbance.</p>
<p><i>Aquila audax subsp. fleayi</i> Tasmanian wedge-tailed eagle - Endangered</p>	<p>An eagle nest survey was undertaken in February 2019. A copy of the report is provided in Attachment 4. The survey was undertaken across proposed turbine locations plus a buffer of 1 km. Due to a modification of turbines areas an additional survey will be conducted in the 2020 breeding season. Five registered nests were confirmed within the project area and three new nests were recorded. There are also seven registered sites immediately adjoining the boundary of the site and two of these near the Shannon River were confirmed during survey. These are identified on the map at Attachment 5. The assessment of nesting habitat within the project area determined that 6% of the site provided optimum nesting habitat, 20% of the site provided secondary nesting habitat and 74% was degraded and unlikely to be used as nesting habitat. There are extensive records of this species within the project area and the wider locality (58 records on the Tasmanian Natural Values Atlas database). Wind farms are known to have direct impacts on this species, through collision with turbine blades, and indirect impacts due to habitat loss and disturbance during nesting. The unmitigated proposal has the potential to have a significant impact on this species within the project area.</p>
<p><i>Botaurus poiciloptilus</i> Australasian bittern - Endangered</p>	<p>This species utilises shallow wetland areas and occurs infrequently inland. Any presence on site will be limited to suitable waterbodies or water courses which will be avoided by the proposed wind farm. Collision with turbine blades and resultant mortality is a potential threat.</p>
<p><i>Ceyx azureus diemenensis</i> Tasmanian Azure</p>	<p>This species utilises forested habitats along</p>

Species	Impact
Kingfisher - Endangered	major river systems. Any presence on site will be limited to suitable water courses which will be avoided by the proposed wind farm. Collision with turbine blades and resultant mortality is a potential threat.
Dasyurus maculatus subsp. Maculatus Spotted-tailed quoll - Vulnerable	This species is present on site and is likely to utilise a range of habitats for denning and hunting / foraging. There is potential for impacts on the habitats used by this species and the extent of these impacts will be determined by the results of full site survey and habitat modelling. Given the extent of suitable habitats available for this species, it is considered that the modification of 90 ha across the project area is unlikely to have a significant impact.
Dasyurus viverrinus Eastern quoll - Endangered	This species prefers dry grassland and forest mosaics which are bounded by agricultural land, and is known to occur on site. There is potential for impacts on the habitats used by this species and the extent of these impacts will be determined by the results of full site survey and habitat modelling. Given the extent of suitable habitats available for this species, it is considered that the modification of 90 ha across the project area is unlikely to have a significant impact.
Lathamus discolour Swift Parrot - Critically Endangered	This species may utilise eucalypt forests within the project area as a foraging resource. There is potential for impacts on the habitats used by this species and the extent of these impacts will be determined by the results of full site survey and habitat modelling. Collision with turbine blades and resultant mortality is a potential threat.
Oreixenica ptunarra Ptunarra Brown Butterfly - Endangered	This species is likely to occur only in Poa dominated habitats. There are 2.8 ha of mapped Poa grasslands within the project area and the full extent of these will be confirmed during site survey. These areas will be avoided as part of the development. This species may also utilise other highland grassland communities, however, the extent of these and their suitability as potential habitat will be determined during survey
Galaxias tanycephalus Saddled Galaxias - Vulnerable Paragalaxias dissimilis Shannon Galaxias - Vulnerable Paragalaxias mesotes Arthurs Galaxias - Endangered	These species live in freshwater lakes and streams. Any presence on site will be limited to suitable water courses which will generally be avoided by the proposed wind farm.

Species	Impact
	Implementation of appropriate soil and water management protocols will reduce the potential for impacts on water quality during construction. No significant impact on these species is considered likely.
Perameles gunnii subsp. gunnii Eastern Barred Bandicoot - Vulnerable	This species is present on site and is likely to utilise grassland habitats and forest/pasture mosaics. There is potential for impacts on the habitats used by this species and the extent of these impacts will be predicted by the results of full site survey and habitat modelling. Given the extent of suitable habitats available for this species, it is considered that the modification of 90 ha across the project area is unlikely to have a significant impact.
Sarcophilus harrisii Tasmanian devil - Endangered	This species is present on site and is likely to utilise a range of habitats for denning and hunting / foraging. Extensive survey of suitable habitats, and implementation of appropriate devil den identification and management protocols prior to construction are frequently used to minimise impacts on this species. The potential for impacts on active breeding sites of this species is considered to be low due to the ability to detect and avoid these or render future den sites unusable. Given the extent of suitable habitats available for this species, it is considered that the modification of 90 ha across the project area is unlikely to have a significant impact. Tasmanian devils are susceptible to collision with motor vehicles and the implementation of appropriate signage and management across the project area during construction and operation will mitigate the risks associated with road kill mortality.
Tyto novaehollandiae castanops Masked owl - Vulnerable	This species has been recorded on site and will likely utilise a range of habitats including forest mosaics and open areas. This species nests in old growth trees with hollows which are likely to be present within the project area. There is potential for impacts on the breeding and hunting habitats used by this species and the extent of these impacts will be determined by the results of full site survey and habitat modelling. Collision with turbine blades and resultant mortality is a potential threat.
Hirundapus caudacutus White-throated needletail - Vulnerable	This species occupies a range of habitats and is almost exclusively aerial. It is a non-breeding

Species	Impact
	migrant in Australia. There is potential for this species to be directly impacted through collision with wind turbines and the extent of this impact will be determined by the results of full site survey and habitat modelling.

2.4.2 Do you consider this impact to be significant?

Yes

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?

Yes

2.5.1 Impact table

Species	Impact
Apus pacificus fork-tailed swift Hirundapus caudacutus white-throated needletail	These species occupy a range of habitats and are both almost exclusively aerial. There is potential for these species to be directly impacted through collision with wind turbines and the extent of this impact will be determined by the results of full site survey and habitat modelling.
Myiagra cyanoleuca satin flycatcher	This species occupies forest habitats which will be impacted at very low levels across the project area. There is potential for these species to be directly impacted through collision with wind turbines.
Actitis hypoleucos common sandpiper Calidris acuminata sharp-tailed sandpiper Calidris melanotos pectoral Sandpiper Gallinago hardwickii Latham's snipe Actitis hypoleucos common sandpiper	These species, if present, are likely to utilise the same habitats on site. Each of these migratory species may be found near lakes and wetlands in the locality and could utilise the smaller water bodies or wetland areas that are present on site. Some species are predominantly coastal, but all have been recorded inland and it is possible that they may use the wetlands or riparian habitats present on site. The avoidance of the wetland areas, and the location of turbines and associated infrastructure away from watercourses as a matter of best practice, will reduce the potential for impacts on these species due to loss of habitat. There are also direct impacts from wind farms associated with

Species	Impact
	mortality due to collision with turbine blades.

2.5.2 Do you consider this impact to be significant?

Yes

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 site has been used for forestry, including plantation, and is also used for grazing and some fallow deer hunting. Some areas of native vegetation have been retained including moorland/sedgeland, wetlands, heathy scrub and eucalypt forest and woodland. There are small patches of remnant vegetation which remain intact, these being located on rocky outcrops likely making them inaccessible for logging. A map of vegetation within the project area, grouped by key vegetation type, is provided at Attachment 3. Approximately 3,450 ha of the project area, or 34.5%, is mapped as agricultural, cleared or regenerating cleared land.

The following native vegetation communities form the vegetation groupings present within the project area and mapped in Attachment 3.

Mapped grouping

Native Vegetation Communities*

Moorland, sedgeland, rushland, peatland

Highland grassy sedgeland*

Native grassland

Highland Poa grassland*

Saltmarsh and wetland

Freshwater aquatic herbland

Fresh water aquatic sedgeland and rushland

Wetland (undifferentiated)*

Scrub, heathland and coastal complexes

Eastern alpine heathland

Leptospermum scrub

Subalpine heathland

Eucalypt forest and woodland

Eucalyptus amygdalina forest and woodland on dolerite

Eucalyptus coccifera forest and woodland

Eucalyptus delegatensis dry forest and woodland

Eucalyptus delegatensis wet forest (undifferentiated)

Eucalyptus pauciflora forest and woodland on dolerite

Eucalyptus rodwayi forest and woodland

Acacia dealbata forest

* Denotes Threatened Native Vegetation Community under NC Act

An assessment of the likelihood of EPBC species occurring on site is provided in the Significant Impact Assessment at Attachment 6.

The following EPBC Act listed fauna species have been recorded previously on site. A map showing the location of records for these species is provided at Attachment 7. Two state listed species, grey goshawk and white-bellied sea-eagle (a marine listed EPBC species), have also been recorded.

Species

Common Name

EPBC Status

Invertebrates

Oreixenica ptunarra

Ptunarra Brown Butterfly

E

Fish

Galaxias tanycephalus

Saddled Galaxias

V

Paragalaxias dissimilis

Shannon Galaxias

V

Paragalaxias eleotroides

Great Lake Galaxias

V

Paragalaxias mesotes

Arthurs Galaxias

E

Birds

Lathamus discolor

Swift Parrot

CE

Calidris ferruginea

curlew sandpiper

CE; Mi

Numenius madagascariensis

Eastern curlew

CE; Mi

Aquila audax subsp. fleayi

Tasmanian wedge-tailed eagle

E

Botaurus poiciloptilus

Australasian bittern

E

Ceyx azureus diemenensis

Tasmanian Azure Kingfisher

E

Tyto novaehollandiae castanops

Masked owl

V

Mammals

Dasyurus maculatus subsp. Maculatus

Spotted-tailed quoll

V

Dasyurus viverrinus

Eastern quoll

E

Perameles gunnii subsp. gunnii

Eastern Barred Bandicoot

V

Sarcophilus harrisii

Tasmanian devil

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

The project area is located within the Central Lakes and is surrounded by numerous lakes of varying sizes. These are identified on the map at Attachment 8. Hydrology within the project area is dominated by the Shannon River systems and the associated Wihareja and Allwrights Lagoon.

Great Lake is a nationally significant wetland located to the north west of the project area. This is a glacial lake and was originally a shallow wetland with satellite lakes, however, it has been extensively modified for use for hydro-electric power generation. It is located within the Great Lake catchment, located to the north of the Ouse catchment that contains the project area. Kemps Marsh to the east is also a nationally significant wetland located approximately 4 km northwest of Interlaken. As with Interlaken Lakeside Reserve (a Ramsar site), this wetland is in a separate catchment to the project area.

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

The geology of the site is generally classified in the Mineral Resource Tasmania Geological Polygons, 1:25,000 mapping as Basalt and related pyroclastic rocks (Tb) and Dolerite with locally developed granophyre (Jd), with some areas of Sand gravel and mud of alluvial, lacustrine and littoral origin (Qh).

The physical environment is significantly varied across the site, with a combination of remnant vegetation, forestry and cleared grazing land. Selective logging or clear felling has been undertaken in some areas in the southern part of the site, and plantation forestry is now present. Existing native ecosystems within the site are characterised by highland vegetation, including moorland, sedgeland, rushland, peatland and alpine heathland as outlined in Section 3.1.

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

The project area is located in the Highland Lakes district of Tasmania and is surrounded by a number of lakes, including one Ramsar wetland (16 km to the east) and two wetlands of national significance (7 km to the north and 14 km to the east). These are located in separate catchments to the one containing the project area.

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

There are several native vegetation communities mapped on site which are listed as Threatened under Schedule 3 of the NC Act. Sphagnum peatland, which is listed as 'Rare', is the only Tasmanian vegetation community listed in the Conservation Advice issued for the TEC as being associated with the TEC. Highland Poa grassland and Highland grassy sedgeland

vegetation communities are both threatened communities listed under the NC Act and both contain species consistent with the TEC. These have been mapped and are identified at Attachment 2. The following EPBC Act listed flora species have been recorded previously on site. A map showing the location of records for these species is provided at Attachment 9.

Scientific Name

Common Name

EPBC Status*

Acacia axillaris

Midland Wattle

V

Dianella amoena

Grassland Flaxlily

E

Barbarea australis

Native Wintercress

E

Colobanthus curtisiae

Grassland cupflower

V

Eucalyptus gunnii subsp. *divaricata*

Miena cider gum

E

Glycine latrobeana

clover glycine

V

Pterostylis pratensis

liawenee greenhood

V

Pterostylis wapstrarum

fleshy greenhood

CE

Lepidium hyssopifolium

soft peppercress

E

Leucochrysum albicans var. *tricolor*

Grassland paperdaisy

E

Prasophyllum crebriflorum

Crowded Leek-orchid

E

Xerochrysum palustre

Swamp Everlasting

V

* EPBC status CE = Critically Endangered; E = Endangered; V = Vulnerable

The following flora species listed as threatened under the state TSP Act have been recorded previously within, or within 500 m of, the project area.

Scientific Name

Common Name

TSP Act Status*

Agrostis australiensis

southern bent

R

Agrostis diemenica

flatleaf southern bent

R

Asperula minima

mossy woodruff

R

Asperula scoparia subsp. scoparia

prickly woodruff

R

Asperula subsimplex

water woodruff

R

Calocephalus lacteus

milky beautyheads

R

Hovea montana

mountain purplepea

R

Hovea tasmanica

rockfield purplepea

R

Isoetes drummondii subsp. drummondii

plain quillwort

R

Isoetes humilior

veiled quillwort

R

Muehlenbeckia axillaris

matted lignum

R

Myosurus australis

southern mousetail

E

Myriophyllum integrifolium

tiny watermilfoil

V

Pentachondra ericifolia

fine frillyheath

R

Pilularia novae-hollandiae

Australian pillwort

R

Plantago glacialis

small star plantain

R

Ranunculus pumilio var. *pumilio*

ferny buttercup

R

Rhodanthe anthemoides

chamomile sunray

R

Scleranthus brockiei

mountain knawel

R

Taraxacum aristum

mountain dandelion

R

Trithuria submersa

submerged watertuft

R

Uncinia elegans

handsome hooksedge

R

Viola cunninghamii

alpine violet

R

* TSP Act status: R = rare; E = endangered; V = vulnerable

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

The proposed wind farm site incorporates a plateau in the north, with an elevation of approximately 900 m ASL. To the north and east are high ridge areas with elevations of 1,000-1,100 m ASL which separate the site from Arthurs Lake and Great Lake. The site narrows west of the Lagoon of Islands wetland before widening to include land on Bakers Tier and the area loosely bounded by the Shannon River and Blackburn Creek, with elevation falling to approximately 600 m.

Within the site local conditions are determined by the presence of major and minor watercourses associated with the Shannon River and its tributaries. Slopes on the site range

from river flats to moderate slopes in forested areas. A number of locations along the existing 220kV powerline corridor are under consideration for the location of a switchyard or substation including west and east of the Highland Lakes Rd where there are larger relatively level areas. A second powerline connection to the south west of the site is also under consideration.

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

The site contains areas of intact vegetation and cleared areas used for grazing and or forestry. The extent of cleared land is evident in Attachment 3. Approximately 34.5% of the site has previously been cleared. The balance of the site contains native vegetation.

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

No Commonwealth heritage places are present within the project area. The nearest state listed heritage item is Steppes Hall to the east but outside the project area.

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

An Aboriginal Heritage Assessment will be undertaken across the project area.

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

The land is all freehold land. An area of Forestry Tasmania land is located within the boundary of the site but is excluded from the development.

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

Current land uses such as forestry and grazing will continue throughout construction and once the proposed wind farm is commissioned.

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.

Avoidance measures

The key approach proposed to minimise impacts on MNES will be avoidance of impacts. Turbines and associated infrastructure will, wherever possible, be located to avoid species and communities listed under the EPBC Act. A map is provided in Attachment 10 which identifies those areas which, based on the wedge-tailed eagle survey and other desktop information, may be avoided to protect MNES. Areas excluded from development total approximately 4,253 ha and include:

- areas of the Alpine Sphagnum Bogs and Associated Fens TEC – the extent of the TEC will be confirmed through field survey and the location of proposed turbines refined to avoid the community where possible – for the purposes of this referral the estimate of 1,736 ha is used – noting that this is unconfirmed and just over 5 ha will potentially be impacted.- all wedge-tailed eagle nests plus a 1 km buffer. This includes areas where buffers from nests located adjacent the boundary of the project area extend into the area. This equates to an area of 1,287 ha.- all water bodies within the project area and areas required to be excluded due to existing conservation covenants and landowner agreements – this equates to 1,230 ha.

Other measures will include the following:

- Investigate options with landowners for the installation of fencing to prevent stock access to confirmed TEC areas if appropriate for management- An eagle utilisation survey of 24-month duration will be completed and utilisation maps of wedge-tailed eagle activity will be produced. If this plan identifies a conflict between flight paths and turbine locations, the configuration of turbines will be amended to avoid significant risk of eagle strike.- Prior to any works occurring, suitable den sites within field confirmed Tasmanian devil habitat will be inspected to ensure no active nests will be destroyed.- Habitat modelling will be prepared based on field survey, land form, soils and literature review to identify any parts of the project area which could be avoided.- Maintenance of surface hydrology when constructing roads and installing cabling between turbines to minimise impacts on soil moisture conditions in areas supporting and adjacent to the Alpine Sphagnum Bogs and Associated Fens TEC

Management Measures

Where impacts cannot be avoided, management measures, including but not limited to the following, will be implemented to ensure that ongoing impacts are minimised as far as reasonable:

- Prior to any works on site, suitable wedge-tailed eagle nest sites within 1 km will be checked for activity (nesting behaviour or active nest). If a new nest site has been established the EPA and the Commonwealth Department of the Environment and Energy will be notified and additional survey of new nests undertaken if required.- Construction works will be timed and designed to avoid disturbance of active eagle nests- No disturbance will occur within 500 m or 1 km line-of-sight of an active eagle nest (under preparation or containing eggs, chicks or fledglings). - Disturbance includes construction activities and the operation of turbines.- Removal of any carcasses associated with calving or lambing activities on the property to an appropriate facility.- General management of pest species (such as rabbits) on site to reduce prey numbers. Any carcasses associated with culling activities are to be removed to an appropriate facility.- Tasmanian Devil warning signs on road side and education of employees on site to reduce the potential for mortality associated with road kills.- Management of fire and weeds within the project area to protect identified habitats and the confirmed areas of TEC.

Mitigation Measures

Direct unavoidable impacts will be mitigated including:

The provision of offsets for areas of TEC or habitat which cannot be avoided. This may include the provision of areas of equivalent habitat values which are preserved or financial contributions for matters such as research into the MNES. Development of rehabilitation programs or restoration projects related to habitats, communities or specific species (such as recovery centres for injured eagles) Investment of financial offset contributions into research aimed at assessing the impact of wind farms on eagle species and the effectiveness of mitigation measures based on the accumulated records and experience at operational sites.

The key approach proposed to minimise impacts on MNES will be avoidance of impacts. Turbines and associated infrastructure will, wherever possible, be located to avoid species and communities listed under the EPBC Act. A map is provided in Attachment 10 which identifies those areas which, based on the wedge-tailed eagle survey and other desktop information, may be avoided to protect MNES. Areas excluded from development total approximately 4,253 ha and include:

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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.

Environmental outcomes will include retention of TEC, if present within the project area, to the greatest extent possible. Operational and land management changes will potentially result in an improvement in the condition of the TEC.

Habitat for threatened species will be protected wherever possible and surveys for threatened plants, in particular, will inform the location of works and will minimise impact areas. Infrastructure will be located to avoid habitats and areas otherwise used by threatened species.

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

Listed threatened species and communities - Yes

5.1.5 Listed migratory species

Listed migratory species - Yes

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.

No heritage listed properties or wetlands of national or international significance are impacted. No Commonwealth land or areas are involved and no nuclear actions are proposed. Attachment 6 assesses the potential for impacts and determined that most species potentially occurring will not be significantly impacted.

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.

Yes. Epuron is a corporate member of the Clean Energy Council (CEC), is a founding signatory to the CEC Best Practice Charter for Renewable Energy Developments and is committed to honouring the Best Practice Charter in its renewable energy projects. Epuron has never been involved in any issue related to a breach of environmental regulations.

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.

None applicable

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.

Epuron aims to ensure all of its developments meet industry best practice and is committed to continual improvement of development practices. Epuron is a corporate member of the Clean Energy Council (CEC), is a founding signatory to the CEC Best Practice Charter for Renewable Energy Developments and is committed to honouring the Best Practice Charter in its renewable energy projects.

Epuron has been a leader in the development of best practices, including contributions to the development of various government and industry guidelines. It has consistently delivered on project commitments and was one of the first companies in Australia to propose a community development fund as part of a renewable energy project, a commitment which continues to this day. Epuron has a Community Consultation Framework which is the basis for the extensive community and stakeholder engagement processes it undertakes before and during the design, assessment and approvals stages of each project. The commitments in the Best Practice

Charter are listed below:

We will engage respectfully with the local community, including Traditional Owners of the land, to seek their views and input before finalising the design of the project and submitting a development application. We will provide timely information and be accessible and responsive in addressing the local community's feedback and concerns throughout the lifetime of the development. We will be sensitive to areas of high biodiversity, cultural and landscape value in the design and operation of projects. We will minimise the impacts on highly productive agricultural land where feasible and explore opportunities to integrate continued agricultural production into the project. We will consult the community on the potential visual, noise, traffic and other impacts of the development, and on the mitigation options where relevant. We will support the local economy by providing local employment and procurement opportunities wherever possible. We will offer communities the opportunity to share in the benefits of the development, and consult them on the options available, including the relevant governance arrangements. We commit to using the development to support educational and tourism opportunities where appropriate. We will demonstrate responsible land stewardship over the life of the development and welcome opportunities to enhance the ecological and cultural value of the land. At the end of the project's design or permitted life we will engage with the community on plans for the responsible decommissioning, or refurbishment/repowering of the site.

Epuron requires all contracted construction and operation parties to demonstrate their environmental management credentials and put in place required environmental management systems.

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.

Liverpool Range Wind Farm 2014/7136 (approved subject to conditions)

White Rock Wind Farm 2011/5834 (not a controlled action)

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
Wildspot Consulting 2019. St Patricks Plains Wedge-tailed eagle nest search and assessment, Central Highlands Tasmania	Moderate level of confidence – the survey was undertaken during the breeding season and extended beyond the boundary of the site. Qualifications regarding the condition of surrounding vegetation (recently burned) and other constraints were identified in the survey report.	Some uncertainty regarding nests which were not accessible. Follow up survey will be undertaken.
St Patricks Plains Wind Farm Stakeholder Engagement Plan, Epuron Projects Pty Ltd, April 2019.	High level of confidence - this plan has been used by Epuron on multiple previous occasions and resulted in effective engagement.	None
Department of the Environment (2015) National recovery plan for the Alpine Sphagnum Bogs and Associated Fens ecological community. Department of the Environment, Canberra and associated documentation.	Moderate level of confidence – this is an authorised set of information considered by the Commonwealth regulators. This information has been used to determine the potential for presence, threats and possible impacts and has not been relied upon to support a final assessment.	The qualifications within the documentation are expressed clearly. Full detailed survey and analysis will be completed.
Kitchener, A. & Harris, S. (2013). From Forest to Fjaeldmark: Descriptions of Tasmania's Vegetation. Edition 2. Department of Primary Industries, Parks, Water and Environment, Tasmania.	High level of confidence – this is documentation released by state regulators and recommended as the guide for vegetation system assessment.	None
Department of the Environment (2019). Species Profile and Threats Database, Department of the Environment, Canberra. Available from: http://www.envir	Moderate level of confidence – this is an authorised set of information considered by the Commonwealth regulators. This information has been used to	The qualifications within the documentation are expressed clearly. Full detailed survey and analysis will be completed.

Reference Source	Reliability	Uncertainties
onment.gov.au/sprat.	determine the potential for presence, threats and possible impacts and has not been relied upon to support a final assessment.	

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?

The proposed St Patricks Plains Wind Farm will contribute up to 959,220 megawatt hours of electricity to the grid per annum, enough for the annual use of approximately 121,300 Tasmanian homes. This will help meet national renewable energy targets, reduce the use of water for power generation and support the State government's target of providing 100% of Tasmania's electricity demand from onshore, renewable energy sources.

Alternatives to the proposed development include not proceeding with any development at this location, and finding an alternative site. The option not to proceed will result in the current land use being unaltered. Construction and operation of a wind farm on the site will allow both continued agricultural use and a significant contribution to the electricity grid of clean energy, the same outcome if any alternative site were chosen. The proposed development seeks to harness part of the Tasmanian electricity network which has 4 separate powerlines connecting the north of the state and the south electrically. Other locations locally have been reviewed but would result in greater distances to connect to the network and potentially greater clearances of native vegetation. Other locations would also be on more elevated land with the associated difficulties of permitting for visual impact and the same survey and impact considerations.

Alternatively, the wind farm could not proceed at all which will result in the overall benefits associated with renewable energy being lost. While the positive impacts of a proposal cannot be used to offset negative impacts when assessing the significance of impacts on MNES, there are wider benefits to the environment and the community that will flow from the project. The ongoing transitioning of electricity generation from fossil fuelled generation to renewable energy, including wind generated power increases the displacement and ultimately replacement of coal fired generation on the National Electricity Market (NEM) network – which Tasmania is part of. Renewable generation in Tasmania in particular also allows a ramping down of hydro generation activities during wind and solar generation, reducing water consumption and saving storages for periods which complement wind and solar. This water saving is not confined to Tasmania. In NSW 15% of the potable water in the state is used for coal fired generation. Any national electricity network connected renewable energy project saves water from fossil fuelled generation elsewhere on the NEM. In Tasmania this water saving can be of benefit during dry or windy periods when water loss is at its highest levels. It also allows storage of water for use when necessary to supplement Tasmanian and mainland supplies, in keeping with the 'battery of the nation' philosophy.

There are other significant environmental benefits associated with renewable energy and the electricity generation proposed equates to a potential saving of up to 182,250 tonnes of carbon dioxide emissions per annum[1]. The proposal represents current best technology in renewable energies and is superior in most outcomes to traditional energy generation methods such as coal fired power gas peaking plants or diesel generation.

Investigations of wind patterns, the availability of appropriate land both in terms of size and form, and accessibility to the existing electricity network, identified the subject site as the best prospect for generating the desired power output.

A number of factors were considered when selecting the site for the development of a wind farm. These include:

- Superior wind speeds,
- Proximity to the electrical grid,
- Land is currently used for grazing and some forestry which can continue throughout operation,
- The low population density of the local area, and
- Suitable geology and terrain.

Development of the proposal has involved an analysis of alternatives in the number of turbines required, the location of turbines on the site and the proximity to neighbouring sensitive receptors (including houses). The following aspects of the project will be carefully balanced:

- Landscape and visual impact,
- The relevance of any contribution the development of the wind farm will have to Tasmania's and Australia's renewable energy generation and emissions reduction targets,
- Any effect the wind farm may have on the local economy,
- Co-location of the wind farm within an active farming and forestry area,
- Any effect on telecommunications, noise and shadow flicker, and
- The cumulative impact on the environment.

These assessments will include extensive monitoring of wedge-tailed eagles known to use the site and the selection of a turbine layout which minimises the potential for bird collision, flora and fauna impacts and community concerns.

Operational measures will be proposed to reduce the potential for wedge-tailed eagle collision and to monitor site conditions and mortalities. Any mortalities involving threatened species will be mitigated through the provision of an offset.

[1] <https://www.environment.gov.au/system/files/resources/80f603e7-175b-4f97-8a9b-2d207f46594a/files/national-greenhouse-accounts-factors-july-2018.pdf>

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

Project Manager

9.2.2 First Name

Donna

9.2.3 Last Name

Bolton

9.2.4 E-mail

d.bolton@epuron.com.au

9.2.5 Postal Address

Level 11, 75 Miller Street
North Sydney NSW 2060
Australia

9.2.6 ABN/ACN

ABN

84150163143 - Epuron Projects Pty Ltd

9.2.7 Organisation Telephone

02 8456 7400

9.2.8 Organisation E-mail

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, DONNA BOLTON, 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: Donna Bolton Date: 10 July 2019

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

Signature: Donna Bolton Date: 10 July 2019

9.3 Is the Proposed Designated Proponent an Organisation or Individual?

Organisation

9.5 Organisation

9.5.1 Job Title

Project Manager

9.5.2 First Name

Donna

9.5.3 Last Name

Bolton

9.5.4 E-mail

d.bolton@epuron.com.au

9.5.5 Postal Address

Level 11, 75 Miller Street
North Sydney NSW 2060
Australia

9.5.6 ABN/ACN

ABN

84150163143 - Epuron Projects Pty Ltd

9.5.7 Organisation Telephone

02 8456 7400

9.5.8 Organisation E-mail

notices@epuron.com.au

Proposed designated proponent - Declaration

I, DONNA BOLTON, 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: Donna Bolton Date: 10 July 2009

9.6 Is the Referring Party an Organisation or Individual?

Organisation

9.8 Organisation

9.8.1 Job Title

Principal Environmental and Land Use Planner

9.8.2 First Name

Leigh

9.8.3 Last Name

Knight

9.8.4 E-mail

lknight@pittsh.com.au

9.8.5 Postal Address

PO Box 1409
Launceston TAS 7250
Australia

9.8.6 ABN/ACN

ABN

67140184309 - PITT & SHERRY (OPERATIONS) PTY. LTD.

9.8.7 Organisation Telephone

0363231973

9.8.8 Organisation E-mail

admin@pittsh.com.au

Referring Party - Declaration

I, ____ Leigh Knight_____, 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: 10 July 2019

Appendix A - Attachments

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

1. Attachment 1 Layout plan.pdf
2. Attachment 2 Alpine Sphagnum Bogs and Associated fens TEC.pdf
3. Attachment 3 Vegetation groups on site.pdf
4. Attachment 4 eagle nest survey.pdf
5. Attachment 5 Map of wedge-tailed eagle nests and 1 km buffers.pdf
6. Attachment 6 Significant Impact Assessment.docx
7. Attachment 7 EPBC listed fauna recorded within the project area.pdf
8. Attachment 8 Hydrological features within the locality.pdf
9. Attachment 9 EPBC listed flora recorded within the project area.pdf
10. Locality map 1.pdf
11. Locality map 2 detail.pdf
12. Site boundary.zip