

# **EPBC Act Referral**

# Salt Creek Wind Farm Transmission Line Corridor

Salt Creek Wind Farm Pty Ltd

Document includes: EPBC Act referral form & Attachments A – F

12 August 2016



# Attachments

Attachment A - Overview and Locality Map

Attachment B - Salt Creek Wind Farm transmission line - biodiversity assessment (MNES)

Attachment C - Salt Creek Wind Farm transmission line options – overview of biodiversity impacts

Attachment D - Maps & Tabulated date - impacts on potential MNES

Attachment E - Salt Creek Wind Farm transmission line construction – MNES impact and management guidelines

Attachment F - Proposed particular manner conditions



# **Referral of proposed action**

# What is a referral?

The *Environment Protection and Biodiversity Conservation Act 1999* (the EPBC Act) provides for the protection of the environment, especially matters of national environmental significance (NES). Under the EPBC Act, a person must not take an action that has, will have, or is likely to have a significant impact on any of the matters of NES without approval from the Australian Government Environment Minister or the Minister's delegate. (Further references to 'the Minister' in this form include references to the Minister's delegate.) To obtain approval from the Environment Minister, a proposed action should be referred. The purpose of a referral is to obtain a decision on whether your proposed action will need formal assessment and approval under the EPBC Act.

Your referral will be the principal basis for the Minister's decision as to whether approval is necessary and, if so, the type of assessment that will be undertaken. These decisions are made within 20 business days, provided sufficient information is provided in the referral.

## Who can make a referral?

Referrals may be made by or on behalf of a person proposing to take an action, the Commonwealth or a Commonwealth agency, a state or territory government, or agency, provided that the relevant government or agency has administrative responsibilities relating to the action.

# When do I need to make a referral?

A referral must be made for actions that are likely to have a significant impact on the following matters protected by Part 3 of the EPBC Act:

- World Heritage properties (sections 12 and 15A)
- National Heritage places (sections 15B and 15C)
- Wetlands of international importance (sections 16 and 17B)
- Listed threatened species and communities (sections 18 and 18A)
- Listed migratory species (sections 20 and 20A)
- Protection of the environment from nuclear actions (sections 21 and 22A)
- Commonwealth marine environment (sections 23 and 24A)
- Great Barrier Reef Marine Park (sections 24B and 24C)
- A water resource, in relation to coal seam gas development and large coal mining development (sections 24D and 24E)
- The environment, if the action involves Commonwealth land (sections 26 and 27A), including:
  - actions that are likely to have a significant impact on the environment of Commonwealth land (even if taken outside Commonwealth land);
  - actions taken on Commonwealth land that may have a significant impact on the environment generally;
- The environment, if the action is taken by the Commonwealth (section 28)
- Commonwealth Heritage places outside the Australian jurisdiction (sections 27B and 27C)

You may still make a referral if you believe your action is not going to have a significant impact, or if you are unsure. This will provide a greater level of certainty that Commonwealth assessment requirements have been met.

To help you decide whether or not your proposed action requires approval (and therefore, if you should make a referral), the following guidance is available from the Department's website:

• the Policy Statement titled Significant Impact Guidelines 1.1 – Matters of National Environmental Significance. Additional sectoral guidelines are also available.

- the Policy Statement titled Significant Impact Guidelines 1.2 Actions on, or impacting upon, Commonwealth land, and actions by Commonwealth agencies.
- the Policy Statement titled Significant Impact Guidelines: Coal seam gas and large coal mining developments—Impacts on water resources.
- the interactive map tool (enter a location to obtain a report on what matters of NES may occur in that location).

#### Can I refer part of a larger action?

In certain circumstances, the Minister may not accept a referral for an action that is a component of a larger action and may request the person proposing to take the action to refer the larger action for consideration under the EPBC Act (Section 74A, EPBC Act). If you wish to make a referral for a staged or component referral, read 'Fact Sheet 6 Staged Developments/Split Referrals' and contact the Referrals Gateway (1800 803 772).

#### Do I need a permit?

Some activities may also require a permit under other sections of the EPBC Act or another law of the Commonwealth. Information is available on the Department's web site.

#### Is your action in the Great Barrier Reef Marine Park?

If your action is in the Great Barrier Reef Marine Park it may require permission under the *Great Barrier Reef Marine Park Act 1975* (GBRMP Act). If a permission is required, referral of the action under the EPBC Act is deemed to be an application under the GBRMP Act (see section 37AB, GBRMP Act). This referral will be forwarded to the Great Barrier Reef Marine Park Authority (the Authority) for the Authority to commence its permit processes as required under the Great Barrier Reef Marine Park Regulations 1983. If a permission is not required under the GBRMP Act, no approval under the EPBC Act is required (see section 43, EPBC Act). The Authority can provide advice on relevant permission requirements applying to activities in the Marine Park.

The Authority is responsible for assessing applications for permissions under the GBRMP Act, GBRMP Regulations and Zoning Plan. Where assessment and approval is also required under the EPBC Act, a single integrated assessment for the purposes of both Acts will apply in most cases. Further information on environmental approval requirements applying to actions in the Great Barrier Reef Marine Park is available from http://www.gbrmpa.gov.au/ or by contacting GBRMPA's Environmental Assessment and Management Section on (07) 4750 0700.

The Authority may require a permit application assessment fee to be paid in relation to the assessment of applications for permissions required under the GBRMP Act, even if the permission is made as a referral under the EPBC Act. Further information on this is available from the Authority:

Great Barrier Reef Marine Park Authority

2-68 Flinders Street PO Box 1379 Townsville QLD 4810 AUSTRALIA Phone: + 61 7 4750 0700 Fax: + 61 7 4772 6093

www.gbrmpa.gov.au

## What information do I need to provide?

Completing all parts of this form will ensure that you submit the required information and will also assist the Department to process your referral efficiently. If a section of the referral document is not applicable to your proposal enter N/A.

You can complete your referral by entering your information into this Word file.

#### Instructions

Instructions are provided in blue text throughout the form.

#### Attachments/supporting information

The referral form should contain sufficient information to provide an adequate basis for a decision on the likely impacts of the proposed action. You should also provide supporting documentation, such as environmental reports or surveys, as attachments.

Coloured maps, figures or photographs to help explain the project and its location should also be submitted with your referral. Aerial photographs, in particular, can provide a useful perspective and context. Figures should be good quality as they may be scanned and viewed electronically as black and white documents. Maps should be of a scale that clearly shows the location of the proposed action and any environmental aspects of interest.

Please ensure any attachments are below three megabytes (3mb) as they will be published on the Department's website for public comment. To minimise file size, enclose maps and figures as separate files if necessary. If unsure, contact the Referrals Gateway (email address below) for advice. Attachments larger than three megabytes (3mb) may delay processing of your referral.

# Note: the Minister may decide not to publish information that the Minister is satisfied is commercial-in-confidence.

### How do I pay for my referral?

From 1 October 2014 the Australian Government commenced cost recovery arrangements for environmental assessments and some strategic assessments under the EPBC Act. If an action is referred on or after 1 October 2014, then cost recovery will apply to both the referral and any assessment activities undertaken. Further information regarding cost recovery can be found on the <u>Department's website</u>.

## Payment of the referral fee can be made using one of the following methods:

#### • EFT Payments can be made to:

BSB: 092-009 Bank Account No. 115859 Amount: \$7352 Account Name: Department of the Environment. Bank: Reserve Bank of Australia Bank Address: 20-22 London Circuit Canberra ACT 2601 Description: The reference number provided (see note below)

• **Cheque** - Payable to "Department of the Environment". Include the reference number provided (see note below), and if posted, address:

The Referrals Gateway Environment Assessment Branch Department of the Environment GPO Box 787 Canberra ACT 2601

#### Credit Card

Please contact the Collector of Public Money (CPM) directly (call (02) 6274 2930 or 6274 20260 and provide the reference number (see note below).

Note: in order to receive a reference number, submit your referral and the Referrals Gateway will email you the reference number.

## How do I submit a referral?

Referrals may be submitted by mail or email.

#### Mail to:

Referrals Gateway Environment Assessment Branch Department of Environment GPO Box 787 CANBERRA ACT 2601

• If submitting via mail, electronic copies of documentation (on CD/DVD or by email) are required.

#### Email to: epbc.referrals@environment.gov.au

- Clearly mark the email as a 'Referral under the EPBC Act'.
- Attach the referral as a Microsoft Word file and, if possible, a PDF file.
- Follow up with a mailed hardcopy including copies of any attachments or supporting reports.

## What happens next?

Following receipt of a valid referral (containing all required information) you will be advised of the next steps in the process, and the referral and attachments will be published on the Department's web site for public comment.

The Department will write to you within 20 business days to advise you of the outcome of your referral and whether or not formal assessment and approval under the EPBC Act is required. There are a number of possible decisions regarding your referral:

#### The proposed action is NOT LIKELY to have a significant impact and does NOT NEED approval

No further consideration is required under the environmental assessment provisions of the EPBC Act and the action can proceed (subject to any other Commonwealth, state or local government requirements).

# The proposed action is NOT LIKELY to have a significant impact IF undertaken in a particular manner

The action can proceed if undertaken in a particular manner (subject to any other Commonwealth, state or local government requirements). The particular manner in which you must carry out the action will be identified as part of the final decision. You must report your compliance with the particular manner to the Department.

#### The proposed action is LIKELY to have a significant impact and does NEED approval

If the action is likely to have a significant impact a decision will be made that it is a *controlled action*. The particular matters upon which the action may have a significant impact (such as World Heritage values or threatened species) are known as the *controlling provisions*.

The controlled action is subject to a public assessment process before a final decision can be made about whether to approve it. The assessment approach will usually be decided at the same time as the controlled action decision. (Further information about the levels of assessment and basis for deciding the approach are available on the Department's web site.)

#### The proposed action would have UNACCEPTABLE impacts and CANNOT proceed

The Minister may decide, on the basis of the information in the referral, that a referred action would have clearly unacceptable impacts on a protected matter and cannot proceed.

#### **Compliance audits**

If a decision is made to approve a project, the Department may audit it at any time to ensure that it is completed in accordance with the approval decision or the information provided in the referral. If the project changes, such that the likelihood of significant impacts could vary, you should write to the Department to advise of the changes. If your project is in the Great Barrier Reef Marine Park and a decision is made to approve it, the Authority may also audit it. (See "*Is your action in the Great Barrier Reef Marine Park,"* p.2, for more details).

## For more information

- call the Department of the Environment Community Information Unit on 1800 803 772 or
- visit the web site http://www.environment.gov.au/topics/about-us/legislation/environment-protection-andbiodiversity-conservation-act-1999

All the information you need to make a referral, including documents referenced in this form, can be accessed from the above web site.

# **Referral of proposed action**

**Project title:** Salt Creek Wind Farm – Transmission line

# **1** Summary of proposed action

#### 1.1 Short description

The proposed action involves the construction of a pole mounted 66 kilovolt transmission line linking the approved Salt Creek Wind Farm to the existing substation in Terang. This alignment will be approximately 49 kilometres in length and extends between the Salt Creek Wind Farm site south of Woorndoo and Terang via Mortlake in Victoria's west (see Attachment A).

#### 1.2 Latitude and longitude

The following coordinates describe the transmission line alignment from Salt Creek to Terang.

These alignments are illustrated on the map in Attachment A and within Attachment C Supplementary waypoints refer to those portions of the alignment that potentially support MNES. Their location is shown in Attachment D.

	Longitude			Latitude			
Order	Degrees	Minutes	Seconds	Degrees	Minutes	Seconds	
			Transmis	sion line Alignm	nent		
1	142 <sup>0</sup>	47'	15.22"	37 <sup>0</sup>	55'	59.34"	
2	142 <sup>0</sup>	47'	18.49"	37 <sup>0</sup>	56'	2.94"	
3	142 <sup>0</sup>	46'	13.8"	37 <sup>0</sup>	57'	19.26"	
4	142 <sup>0</sup>	45'	12.2"	37 <sup>0</sup>	58'	11.14"	
5	142 <sup>0</sup>	45'	1.26"	37 <sup>0</sup>	58'	15.82"	
6	142 <sup>0</sup>	44'	51.68"	37 <sup>0</sup>	58'	50.59"	
7	142 <sup>0</sup>	44'	45.92"	37 <sup>0</sup>	58'	53.94"	
8	142 <sup>0</sup>	44'	39.88"	37 <sup>0</sup>	59'	28.39"	
9	142 <sup>0</sup>	44'	34.19"	37 <sup>0</sup>	59'	32.93"	
10	142 <sup>0</sup>	44'	19.18"	38 <sup>0</sup>	1'	13.08"	
11	142 <sup>0</sup>	44'	24.22"	38 <sup>0</sup>	1'	31.84"	
12	142 <sup>0</sup>	45'	55.73"	38 <sup>0</sup>	2'	58.81"	
13	142 <sup>0</sup>	46'	48.97''	38 <sup>0</sup>	3'	39.06"	
14	142 <sup>0</sup>	46'	33.89"	38 <sup>0</sup>	4'	56.75"	
15	142 <sup>0</sup>	48'	16.74"	38 <sup>0</sup>	5'	8.92"	
16	142 <sup>0</sup>	48'	49.25"	38 <sup>0</sup>	5'	23.96"	
17	142 <sup>0</sup>	49'	2.75"	38 <sup>0</sup>	6'	2.77"	
18	142 <sup>0</sup>	48'	43.16"	38 <sup>0</sup>	7'	40.76"	
19	142 <sup>0</sup>	51'	22.9"	38 <sup>0</sup>	8'	0.1"	
20	142 <sup>0</sup>	50'	53.52"	38°	10'	34.39"	
21	142 <sup>0</sup>	52'	32.34"	38°	10'	45.84"	
22	142 <sup>0</sup>	52'	56.5"	38°	11'	37"	
23	142 <sup>0</sup>	53'	52.19"	38 <sup>0</sup>	11'	42.04"	
24	142 <sup>0</sup>	54'	48.31"	38 <sup>0</sup>	11'	32.75"	
25	142 <sup>0</sup>	54'	52.88"	38º	12'	27.58"	
26	142 <sup>0</sup>	54'	41.69"	38º	12'	11.02"	
27	142 <sup>0</sup>	54'	40.07"	38 <sup>0</sup>	13'	40.58"	

2	8	142 <sup>0</sup>	55'	7.5"	38 <sup>0</sup>	13'	44.29"
2	9	142 <sup>0</sup>	55'	28.63"	38 <sup>0</sup>	13'	29.86"
3	0	142 <sup>0</sup>	55'	52.21"	38 <sup>0</sup>	13'	55.81"
			Supple	mentary Align	ment Zones - Zo	ne A	
	1	142 <sup>0</sup>	44'	58.48"	37 <sup>0</sup>	58'	14.89"
	2	142 <sup>0</sup>	45'	10.77"	37 <sup>0</sup>	58'	9.56"
	3	142 <sup>0</sup>	46'	11.92"	37 <sup>0</sup>	57'	18.06"
	4	142 <sup>0</sup>	47'	16.98"	37 <sup>0</sup>	56'	0.97"
	5	142 <sup>0</sup>	47'	20.79"	37 <sup>0</sup>	56'	2.5"
	6	142 <sup>0</sup>	46'	15.82"	37 <sup>0</sup>	57'	19.32"
	7	142 <sup>0</sup>	45'	13.37"	37 <sup>0</sup>	58'	12.08"
	8	142 <sup>0</sup>	45'	2.74"	37 <sup>0</sup>	58'	16.65"
	9	142 <sup>0</sup>	45'	3.24"	37 <sup>0</sup>	58'	17.23"
1	0	142 <sup>0</sup>	44'	57.48"	37 <sup>0</sup>	58'	18.98"
			Supple	mentary Align	ment Zones - Zo	ne B	
	1	142 <sup>0</sup>	44'	25.29"	38 <sup>0</sup>	0'	39.82"
	2	142 <sup>0</sup>	44'	19.57"	38 <sup>0</sup>	0'	39.42"
	3	142 <sup>0</sup>	44'	22.06"	38 <sup>0</sup>	0'	19.66"
	4	142 <sup>0</sup>	44'	27.66"	38 <sup>0</sup>	0'	20.93"
			Supple	ementary Align	ment Zones - Zo	one C	
	1	142 <sup>0</sup>	46'	46.92"	38 <sup>0</sup>	3'	40.86"
	2	142 <sup>0</sup>	46'	49.7"	38 <sup>0</sup>	3'	41.2"
	3	142 <sup>0</sup>	46'	35.38"	38 <sup>0</sup>	4'	55.97"
	4	142 <sup>0</sup>	47'	27.84"	38 <sup>0</sup>	5'	2.25"
	5	142 <sup>0</sup>	47'	26.3"	38 <sup>0</sup>	5'	4.16"
	6	142 <sup>0</sup>	46'	32.47"	38 <sup>0</sup>	4'	57.62"
			Supple	mentary Align	ment Zones - Zo	ne D	
	1	142 <sup>0</sup>	48'	45.22"	38 <sup>0</sup>	7'	42.43"
	2	142 <sup>0</sup>	48'	40.53"	38 <sup>0</sup>	7'	41.84"
	3	142 <sup>0</sup>	49'	0.17"	38 <sup>0</sup>	6'	3.61"
	4	142 <sup>0</sup>	49'	4.43"	38 <sup>0</sup>	6'	4.18"
					ment Zones - Zo		
	1	142 <sup>0</sup>	54'	37.45"	38 <sup>0</sup>	13'	39.42"
	2	142 <sup>0</sup>	55'	6.65"	38 <sup>0</sup>	13'	42.99"
	3	142 <sup>0</sup>	55'	8.67"	38 <sup>0</sup>	13'	45.12"
	4	142 <sup>0</sup>	54'	37.12"	38 <sup>0</sup>	13'	41.38"

#### 1.3 Locality and property description

The alignment of the proposed transmission line is shown in Attachment A. The transmission line will originate within the the approved Salt Creek Wind Farm and run to the Terang sub-station (TGTS). The transmission line will run along the Woorndoo-Streatham Road, head south through private land to the east of Woodcutter Lane, cross the Hamilton Highway and then head south east across private property crossing Connenwarren Lane and Hopkins Highway until it reaches Mortlake-Farmlingham Road, south of Mortlake.

It will continue south along Mortlake-Farmlingham Road, east along Hinkleys Lane, south along Tapps Lane, east along Cliffords Lane which doglegs and intersects the Noorat-Farminham Road. The transmission line then follows Noorat-Farminham Road to the east before turning south across private land towards Riley Road. It will then run east, crossing the Terang-Morlake Road and continuing towards the Terang sub-station.

The transmission line will comprise galvanised steel poles approximately 20 metres tall spaced bertween 50 and 250 metres apart. The alignment has been selected to avoid known areas of native vegetation (where possible). The proposed action will take place on highly disturbed farm land and on land within road reserves.

The alignment occurs largely within the Victorian Volcanic Plain bioregion and falls within the Glenelg-Hopkins Catchment Management Area.

The proposed transmission line totals approximately 49 km and includes 420 power poles. No access tracks are required for this low voltage transmission line as construction will be undertaken during dry conditions within areas of native vegetation (MNES), when the ground is firm and impacts from vehicles and machinery are considered negligible and temporary. The photo below shows a similar wind farm transmission line power pole footing in south western Victoria.



The transmission line will have up to 420 poles. Only 36 of these will be located where they may potentially affect MNES. Each pole will have a maximum permanent impact 2.5 metres in diameter (c. 4.9 square metres) and a temporary impact zone of 10 metres by 10 metres (100 square metres). All areas reported here are based on this footprint overlaid with native vegetation mapping (i.e. not all temporary disturbance areas support native vegetation or potential for MNES).

The transmission line, as it applies to native vegetation, will have a potential total maximum temporary disturbance footprint of 1.689 hectares. The permanent impact area will be much less than this and will be contained within this area. Temporary impacts on MNES will occur across a maximum of about 0.5 hectares of this area and permanent impacts in about 180 square metres (0.018 hectares within this area (see Table 4).

Size of the development footprint or work area (hectares)

An indicative construction footprint can be found in Attachment E. An example of a similar transmission line in south western Victoria is shown below.



#### 1.5

Street of As a linear project, the proposed action does not have a specific street address. address the site

#### Lot description 1.6

The proposed action is located on the land described in the table below:

Address	Standard Parcel Identifier (SPI)	Lot Details
270 WOODCUTTERS LANE HEXHAM 3273	2\PS708490	Lot 2 on Plan of Subdivision 708490
WOODCUTTERS LANE HEXHAM 3273	2~12\PP2754	Crown Allotment 2 Sect. 12 Parish of Hexham East
WOODCUTTERS LANE HEXHAM 3273	1\PS736627	Lot 1 on Plan of Subdivsion 736627
WOODCUTTERS LANE HEXHAM 3273	2\PS736627	Lot 2 on Plan of Subdivision 736627
WOODCUTTERS LANE HEXHAM 3273	3~7\PP2754	Crown Allotment 3 Sect. 3 Parish of Hexham East
WOODCUTTERS LANE HEXHAM 3273	2\TP828868	Lot 2 on Title Plan 828868
30 WOODCUTTERS LANE HEXHAM 3273	1\TP828868	Lot 1 on Title Plan 828868
30 WOODCUTTERS LANE HEXHAM 3273	1~7\PP2754	Crown Allotment 1 Sect. 7 Parish of Hexham East
30 WOODCUTTERS LANE HEXHAM 3273	1\TP822544	Lot 1 on Title Plan 822544
HEXHAM-WOORNDOO ROAD HEXHAM 3273	2022\PP2754	Crown Allotment 2022 7 Parish of Hexham East
HAMILTON HIGHWAY HEXHAM 3273	1\TP11005	Lot 1 on Town Plan 11005
HAMILTON HIGHWAY HEXHAM 3273	1\PS342923	Lot 1 on Plan of Subdivision 342923
287 HAMILTON HIGHWAY MORTLAKE 3272	2\PS636473	Lot 2 on Plan of Subdivison 636473
287 HAMILTON HIGHWAY MORTLAKE 3272	1\PS636473	Lot 1 Plan of Sudivison 636473
BOONERAH ESTATE ROAD MORTLAKE 3272	2\LP121574	Lot 2 on Lodged Plan 121574
HAMILTON HIGHWAY MORTLAKE 3272	2\PS347828	Lot 2 on Plan of Sudivision 347828
BOONERAH ESTATE ROAD MORTLAKE 3272	4B~2\PP2754	Crown Allotment 4B Parish of Hexham East
BOONERAH ESTATE ROAD MORTLAKE 3272	3\TP11005	Lot 3 on Title Plan 11005
BOONERAH ESTATE ROAD MORTLAKE 3272	3\PS342923	Lot 3 on Plan of Subdivision 342923
HAMILTON HIGHWAY HEXHAM 3273	2\TP11005	Lot 2 on Title Plan 11005
HAMILTON HIGHWAY HEXHAM 3273	1\TP12056	Lot 1 on Title Plan 12056
HAMILTON HIGHWAY MORTLAKE 3272	3\TP244621	Lot 3 on Title Plan 244621
HAMILTON HIGHWAY MORTLAKE 3272	1\TP163753	Lot 1 on Title Plan 163753
HAMILTON HIGHWAY MORTLAKE 3272	1\TP244621	Lot 1 on Title Plan 244621
35 THULBORNS LANE MORTLAKE 3272	25\PP2425	Crown Allotment 25 Parish of Connewarren
DOWLING STREET MORTLAKE 3272	24~28\PP5553	Crown Allotment 25 Sect. 28 Parish: Township of Mortlake
2085 TERANG-MORTLAKE ROAD MORTLAKE 3272	16\LP4917	Lot 16 on Title Plan 4917
SAGNOLS LANE MORTLAKE 3272	2001\PP3196	Crown Allotment 2001 Parish of Mortlake
SAGNOLS LANE MORTLAKE 3272	1\TP531026	Lot 1 on on Title Plan 531026
MORTLAKE-FRAMLINGHAM ROAD MORTLAKE 3272	9\LP4917	Lot 9 on Lodged Plan 4917
TERANG-MORTLAKE ROAD MORTLAKE 3272	10\LP4917	Lot 10 on Lodged Plan 4917
HOOD AVENUE MORTLAKE 3272	2\LP69602	Lot 2 on Lodged Plan 69602
2085 TERANG-MORTLAKE ROAD MORTLAKE 3272	18\LP4917	Lot 18 on Lodged Plan 4917
SAGNOLS LANE MORTLAKE 3272	2002\PP3196	Crown Allotment 2002 Parish of Mortlake
DOWLING STREET MORTLAKE 3272	2003\PP5553	Crown Allotment 2003 Parish: Township of Mortlake
DOWLING STREET MORTLAKE 3272	2002\PP5553	Crown Allotment 2002 Parish: Township of Mortlake

59 WOORNDOO-CHATSWORTH ROAD WOORNDOO 3272	9\TP892899	Lot 9 on Title Plan 892899
161 CHAMALLAK LANE THE SISTERS 3265	47A\PP2898	Crown Allotment 47A Parish of Kolora
239 MORTLAKE-FRAMLINGHAM ROAD MORTLAKE 3272	57A\PP2898	Crown Allotment 57A Parish of Kolora
133 MORTLAKE-FRAMLINGHAM ROAD MORTLAKE 3272	1\TP116460	Lot 1 on on Title Plan 116460
TAPPS LANE NOORAT 3265	1\TP956966	Lot 1 on Title Plan 956966
TAPPS LANE KOLORA 3265	1\TP376172	Lot 1 on Title Plan 376172
TAPPS LANE KOLORA 3265	1\TP412906	Lot 1 on Title Plan 412906
TAPPS LANE KOLORA 3265	16B\LP4049	Lot 16B on Lodged Plan 4049
TAPPS LANE KOLORA 3265	1\TP204033	Lot 1 on Title Plan 204033
GOVERNMENT ROAD	2001\PP2898	Crown Allotment 2001 Parish of Kolora
TRIGGS WEST ROAD TERANG 3264	6B~16\PP3575	Crown Allotment 6B Sect.16 Parish of Terang
TERANG-MORTLAKE ROAD TERANG 3264	4\PP3575	Crown Allotment 4 Parish of Terang
40 MCCRAE STREET TERANG 3264	3\PP3575	Crown Allotment 3 Parish of Terang
40 MCCRAE STREET TERANG 3264	9A~9\PP3575	Crown Allotment 9A Sect. 9 Parish of Terang
TERANG-MORTLAKE ROAD TERANG 3264	5A~8\PP3575	Crown Allotment 5A Sect. 8 Parish of Terang
40 MCCRAE STREET TERANG 3264	10A~9\PP3575	Crown Allotment 10 A Sect. 9 Parish of Terang
TERANG-MORTLAKE ROAD TERANG 3264	2\PS415188	Lot 2 on Plan of Sudivision 415188
40 MCCRAE STREET TERANG 3264	10B~9\PP3575	Crown Allotment 10B Sect. 9 Parish of Terang
TRIGGS WEST ROAD TERANG 3264	11B~9\PP3575	Crown Allotment 11B Sect. 9 Parish of Terang
TERANG-MORTLAKE ROAD TERANG 3264	5~9\LP4049	Lot 5 Block 9 on Lodged Plan 4049
TERANG-MORTLAKE ROAD TERANG 3264	2\TP832301	Lot 2 on Title Plan 832301
TERANG-MORTLAKE ROAD TERANG 3264	1\TP832301	Lot 1 on Title Plan 832301
TERANG-MORTLAKE ROAD TERANG 3264	5~11\LP4049	Lot 5 Block 11 on Lodged Plan 4049
TERANG-MORTLAKE ROAD TERANG 3264	2\PS525219	Lot 2 on Plan of Subdivison 525219

#### 1.7 Local Government Area and Council contact (if known)

The proposed action is located within Moyne Shire and Corangamite Shire.

Refer to Section 2.4 for information on relevant Victorian's approvals for the proposed action and the relevant contact.

#### 1.8 Time frame

Work on the proposed action will begin in 2017.

1.9	Alternatives to proposed action	~	Νο
			Yes, you must also complete section 2.2
1.10	Alternative time frames etc	✓	No
			Yes, you must also complete Section 2.3. For each alternative, location, time frame, or activity identified, you must also complete details in Sections 1.2-1.9, 2.4-2.7 and 3.3 (where relevant).
1.11	State assessment		No
		~	Yes, you must also complete Section 2.5

1.12	2 Component of larger action		No
			Yes, you must also complete Section 2.7
1.13	Related actions/proposals		No
		✓	<ul> <li>Yes, provide details:</li> <li>The proposed action is directly related to the proposed Salt Creek Wind Farm. The Salt Creek Wind Farm was refered to the Commonweatlh 22 August 2006 (EPBC/3012). On the 19 September 2006, the delegate for the Minister for Environment and Heritage determined that the Salt Creek Wind Farm was not a 'controlled action.'</li> </ul>
1.14	Australian Government funding	$\checkmark$	No
			Yes, provide details:
1.15	Great Barrier Reef Marine Park	✓	No Yes, you must also complete Section 3.1 (h), 3.2 (e)

# 2 Detailed description of proposed action

#### 2.1 Description of proposed action

The proposed action seeks to establish 49 km of pole mounted 66 kilovolt transmission line from the proposed Salt Creek Wind Farm to the existing substation in Terrang.

It is expected that the transmission line will require 420 poles at spacings of of between 50 and 250 metres. Only 36 of these poles have the potential to impact on MNES.

Spacing varies due to:

- the changes to load bearing when the alignment requires a change in direction; and
- to span sensitive vegetation and minimise the impacts to native vegetation along the alignment.

The key building and works components will generally involve:

- Establishment of power pole on type of construction;
- Erection of approximately 20 metre tall hardwood/concrete/steel poles;
- Access the site and erect the poles using cranes and lifting equipment (a proposed temporary disturbance footprint of 100 square metres has been assumed and 4.91 square metre permanent footprints for final pole footings);
- The establishment of on ground earthing; and
- The potential removal of a small amount of native vegetation.

Construction of the transmission line will occur in dry conditions within any areas containing MNES. During these conditions the ground is firm and impacts from vehicles and machinery are considered negligible and temporary. Brett Lane and Associates (BL&A) have assessed temporary disturbance as up to one week of construction activity per pole location, including 1-2 days per pole for its actual erection involving three to four passes by a construction vehicle (drilling rig, concrete mixer and crane).

Ecological assessment was undertaken by BL&A in 2016. The assessment considered a corridor of 50 metres either side of the alignment as defined in section 1.2 and illustrated in Attachment B. This corridor forms the study area here referred in section 3.1(d).

Temporary construction works associated with the installation of the infrastructure are tailored to avoid significant impact on critical sites as detailed in Attachment E. Construction management guidelines are proposed to manage any additional risk to MNES along the entirety of the alignment and will apply to all sections of the alignment where native vegetation removal is required.

Detailed assessment of MNES has been undertaken along the entire alignment corridor. This assessment is located in Attachment B.

#### 2.2 Alternatives to taking the proposed action

There are no alternatives to the proposed action. This proposed action is directly related to the proposed Salt Creek Wind Farm. The Salt Creek Wind Farm was referred to the Commonwealth 22 August 2006 (EPBC/3012). The proposed action will facilitate the connection of the approved Salt Creek Wind Farm to the national electricity network and the proposed alignment has been specifically chosen in order to avoid and reduce impacts to MNES, native vegetation and aboriginal heritage.

When deciding on the best route considering the constraints outlined above, two transmission line options were originally considered and assessed for their impacts on ecological values in project planning – an eastern and a western option. The two alignment options are illustrated in the figures in Attachment C, which also documents this assessment.

The western option is the proposed action outlined for this referral. The western option (subject to this referral) is slightly shorter and contains much less MNES matters, native vegetation and potentinal for aboriginal heritiage sites when compared to the eastern alignment.

The eastern option would impact on three times as much Natural Temperate Grassland of the Victorian Volcanic Plain (NTGVVP) and areas of Seasonal Herbaceous Wetland (Freshwater) of the Temperate Lowland Plains (SHWSEA). Additionally a greater proportion of affected public land on the eastern alignment supported high-quality vegetation, compared to the western alignment. Accordingly the eastern alignment has been abandonded.

#### 2.3 Alternative locations, time frames or activities that form part of the referred action

There are no alternative locations, timeframes or activities that form part of this referral.

#### 2.4 Context, planning framework and state/local government requirements

#### Flora and Fauna Guarantee Act 1988

The *Flora and Fauna Guarantee Act 1988* (FFG Act) is the key piece of Victorian legislation for the conservation of threatened species and communities and for the management of potentially threatening processes. Under the FFG Act a permit will be required to take listed flora from public land (such as road reserves).

#### Planning and Environment Act 1987 – Moyne and Corangamite Planning Schemes

A planning permit will not be required for the use of the land and building and works associated with the installation of a transmission line. Transmission lines under 220,000 kV are considered minor utility installations under the planning scheme and are exempt from building and works permit requirements.

However, planning permits are required for any vegetation removal under the Moyne and Corangamite Planning Schemes. Any native vegetation must be removed in accordance with the *Permitted Clearing of Native Vegetation: Biodiversity Assessment Guidelines (DEPI 2013).* These guidelines are incorporated into the Victoria Planning Provisions and provide a guide to how impacts on biodiversity should be considered when assessing an application for a permit to remove, lop or destroy native vegetation.

Clause 61.01 (Minister is responsible authority) specifies the Minister for Planning as the responsible authority for determining planning permit applications for wind energy facilities and for associated infrastructure. This includes applications for native vegetation removal associated with electricity infrastructure (utility and minor utility installations).

Accordingly the Minister for Planning is the responsible authority for determining any future planning permit applications for the proposed action.

Relevant contact is:

 Mr Michael Juttner, Senior Planner, Planning Services Department of Environment, Land, Water and Planning T: 03 8392 5479 michael.juttner@delwp.vic.gov.au

#### Aboriginal Heritage Act 2006

A Cultural Heritage Management Plan (CHMP) is required under the *Aboriginal Heritage Act 2006* for the action. The preparation of the CHMP must be carried out in consultation with the Registered Aboriginal Party (RAP). The RAP will also approve the CHMP (where the RAP is an applicant, the CHMP will be approved by Aboriginal Affairs Victoria).

#### 2.5 Environmental impact assessments under Commonwealth, state or territory legislation

Due to the small amount of native vegetation removal, the proposed action does not meet the criteria for a referral under the Victorian *Environment Effects Act 1978*.

There are no other Commonwealth or state environmental impact assessments relating to the properties described in section 1.6. However, the Minister for Planning will assess the permit applications in accordane with the Moyne and Corangamite Planning Schemes as discussed in Section 2.4 (above).

#### 2.6 Public consultation (including with Indigenous stakeholders)

Trustpower, who propose to carry out the action, have undertaken a significant amount of public consultation dating back to 2006 when the Salt Creek Wind Farm was originally proposed.

As part of the consultation requirements for CHMP 14295 (currently being prepared for the alignment) two Aboriginal groups have been actively involved in the process. Consultation requirements have been guided by relevant legislation and advice from Aboriginal Affairs Victoria. In the proposed construction activity area there exists one registered aboriginal party (Martang) and one registered aboriginal party applicant (Eastern Maar). Both groups have been involved in all fieldwork and have been actively consulted with regarding the project design, and implications for areas of cultural heritage sensitivity and existing Aboriginal Places.

Public consultation has also included engagement with:

- Local community, including door knocks to the immediate neighbour of the wind farm;
- Local contractors during the 2012 'early works' on site;
- Support of local community groups and initiatives including the Woorndoo Football Netball Club, the Woorndoo Community Bus, and the Woorndoo Quick Shear Competition;
- Landowners who are hosting the proposed transmission line;
- Local landholders who will potentially provide offset sites for the project;
- Local CFA;
- Moyne Shire Council;
- Corangagmite Shire Council; and
- Commonweatlh Department of the Environment.

#### 2.7 A staged development or component of a larger project

The proposed action is required to connect the Salt Creek Wind Farm (EPBC/3012) to the national electricity network.

# **3 Description of environment & likely impacts**

# 3.1 Matters of national environmental significance

### 3.1 (a) World Heritage Properties

#### Description

There are no World Heritage Properties located within 10km of the proposal (DoTE 2015a).

#### Nature and extent of likely impact

There are no direct or indirect impacts on any World Heritage Properties.

#### 3.1 (b) National Heritage Places

#### Description

There are no National Heritage Places located within 10km of the proposal (DoTE 2015a)

#### Nature and extent of likely impact

There are no direct or indirect impacts on any National Heritage Places.

#### 3.1 (c) Wetlands of International Importance (declared Ramsar wetlands)

#### Description

There are no wetlands of international importance within 10km of the proposed action.

#### Nature and extent of likely impact

There are no direct or indirect impacts on any Wetlands of National Importance.

#### 3.1 (d) Listed threatened species and ecological communities

#### Description

Ecological assessment determined the potential presence of suitable habitat for five (5) threatened fauna species, nine (9) threatened flora species and one (1) threatened communities, with several historically recorded occurences of threatened flora (1) and fauna (1) within the study area. Due to specific flowering seasons for each of the nine flora species, targeted surveys have not previously been conducted to determined the presence of these communities and species (although these targeted surveys are scheduled). An evaluation of the available survey and desktop data has been carried out to understand their likelihood of occurrence, however targetted surveys are required as discussed in section 5.

One EPBC Act listed threatened communities has the potential to occur in impacted areas of remnant vegetation within the proposed study area:

• Natural Temperate Grassland of the Victorian Volcanic Plain (NTGVVP).

Nine (9) EPBC Act listed flora species have potential to occur within areas of remnant native vegetation in the study area. The following Table 1 provides a summary of habitat and dates of last record for the nine (9) EPBC flora species as well as those assessed for impacts but not considerd likely to occur in the study area, based on the EPBC Act Protected Matters Search Tool output (10 km buffer either side of the whole transmission line alignment).

**Table 1** EPBC Act listed flora species from the search region and likelihood of occurrence within the study area. Species having potential to occur are highlighted in grey.

Name and Status	Habitat	Date of last record	Likelihood of occurence
Adamson's Blown-grass <i>(Lachnagrostis adamsonii)</i> Endangered	Adamson's Blown-grass is mainly found on roadside depressions and flats, associated with drainage lines and small sluggish creeks, particularly where these sites are protected from wind by surrounding rises or by stands of tall grasses.	N/A	Habitat present; although there are no existing records in the search region, survey in the area are likely to have been scarce – <b>Potential to occur</b>
Basalt Rustyhood <i>(Pterostylis basaltica)</i>	Known from only a few small, very localised populations that occur amongst basalt rocks in grassland (Jones 1994).	N/A	No habitat present – <b>Unlikely to occur</b>
Clover Glycine <i>(Glycine latrobeana)</i> Vulnerable	In Victoria, occurs mainly in grasslands and grassy woodlands on basalt soils dominated by Kangaroo Grass or within intermittently flooded streamlines co-dominated by Yellow Gum and Scentbark over mixed grasses and shrubs (in the Grampians/Black Range area). The species also occurs at the Nunniong Plateau in eastern Victoria within sub-alpine woodlands around 1200 metres above sea level on red-brown clays dominated by Snow Gum over an understorey of Small-fruit Hakea, various grasses. At Reef Hills State Park in north-eastern Victoria plants occur in herb-rich woodland. At Yarra Valley Parklands and Meruka Park near Melbourne, vegetation is described as Valley Grassy Forest, dominated by Eucalyptus melliodora (Yellow Box), with scattered Acacia paradoxa (Hedge Wattle). Field layer comprises Austrodanthonia spp. (wallaby grasses) and various forbs. Other former sites in this area occurred in Grassy Dry Forest with Red Box. It is also found rarely in heathland.	25/03/1974	Habitat present – <b>Potential to occur</b>
Coast Dandelion ( <i>Taraxacum</i> <i>cygnorum)</i>	Woodland and scrub on limestone (Scarlett 1999).	N/A	No habitat present – <b>Unlikely to occur</b>
Fragrant Leek- orchid <i>(Prasophyllum suaveolens)</i> Endangered	Occurs in open, species rich native grassland dominated by Themeda triandra with perennial herbs and lilies on poorly drained red-brown soil derived from basalt.	N/A	Habitat present and known to occur adjacent to the study area (i.e. In Woorndoo Grassland Reserve) – <b>Likely to occur</b>
Maroon Leek- orchid <i>(Prasophyllum frenchii)</i> Endangered	Favouring heathland and Grassland on black clays.	N/A	Habitat present; although there are no existing records in the search region, survey in the area are likely to have been scarce – <b>Potential to occur</b>

Matted Flax-lily <i>(Dianella amoena)</i> Endangered	Lowland grassland and grassy woodlands on well-drained to seasonally waterlogged fertile sandy loams to heavy cracking soils derived from sedimentary or volcanic Geology. It is widely distributed from eastern to south-western Victoria.	N/A	Habitat present; although there are no existing records in the search region, survey in the area are likely to have been scarce – <b>Potential to occur</b>
Metallic Sun- orchid ( <i>Thelymitra</i> <i>epipactoides</i> )	Primarily in mesic coastal heathlands, grasslands and woodlands, but also in drier inland heathlands, open forests and woodlands. (Backhouse & Jeanes 1995 in DSEWPC 2003).	N/A	No habitat present – <b>Unlikely to occur</b>
Salt-lake Tussock-grass ( <i>Poa</i> <i>sallacustris)</i>	Margins of brackish to salt lakes (Walsh 1994).	N/A	No habitat present – <b>Unlikely to occur</b>
Spiny Peppercress (Lepidium aschersonii) Vulnerable	Occurs in periodically wet sites such as gilgai depressions and the margins of freshwater and saline marshes and shallow lakes, usually on heavy clay soil. Almost all sites receive some degree of soil waterlogging or seasonal flooding.	1/06/1983	Habitat present – <b>Potential to occur</b>
Spiny Rice- flower ( <i>Pimelea</i> <i>spinescens</i> <i>subsp.</i> <i>spinescens</i> ) Critically Endangered	Grasslands or open shrublands on basalt derived soils (Entwisle 1996). Prefers shallow depressions and drainage lines with moderate soil moisture.	N/A	Recorded north of the study area, <b>likely to</b> occur
Spiral Sun- orchid (Thelymitra matthewsii)	Slightly elevated sites to 300m in well-drained soils (sandy loams to gravelly limestone soils) in light to dense forest; sometimes in coastal sandy flats (Weber & Entwisle 1994).	N/A	No habitat present – <b>Unlikely to occur</b>
Trailing Hop- bush <i>(Dodonaea procumbens)</i> Vulnerable	Grows in low lying, often winter wet areas in woodland, low open-forest heathland and grasslands on sands and clays. Largely confined to SW of Victoria.	N/A	Habitat present; although there are no existing records in the search region, survey in the area are likely to have been scarce – <b>Potential to occur</b>
White Sunray ( <i>Leucochrysum</i> <i>albicans var.</i> <i>tricolor</i> ) Endangered	Western Victoria in dry, open situations.	8/12/1989	Habitat present and known to occur adjacent to the study area (i.e. In Woorndoo Grassland Reserve) – Likely to occur

Three (3) EPBC Act listed fauna species have the potential to occur in the study area. The following Table 2 provides a summary. This assessment of potential occurrence of listed fauna species excludes the following.

- Aquatic invertebrates given they were beyond the scope of the current investigation
- Marine fauna given that the study area is inland
- Oceanic bird species (such as albatrosses and petrels).

The following species that appeared in the EPBC Act Protected Matters Search for the project area (10 km buffer either side of the whole transmission line alignment) were screened for potential impacts. It was concluded that they were unlikely to occur in the study area due to a lack of suitable habitat or their locally extinct status:

- Eastern Barred Bandicoot (*Perameles gunnii*);
- Long-nosed Potoroo (*Potorous tridactlyus tridactylus*);
- Smoky Mouse (*Pseudomys fumeus*);
- Southern Brown Bandicoot (Isoodon obesulus obsulus);
- Australasian Bittern (*Botaurus poiciloptils*);
- Australian Painted Snipe (*Rostratula australis*);
- Curlew Sandpiper (*Calidris ferruguinea*);
- Painted Honeyeater (Grantiella picta);
- Plains-wanderer (*Pedionumus torquatus*);
- Swift Parrot (*Lathamis discolor*);
- Corangamite Water Skink (Eulamprus tympanum marnieae);
- Australian Grayling (*Prototroctes maraena*); and
- Macquarie Perch (*Macquaria australasica*).

#### Table 2 EPBC Fauna and likelihood of occurence

Name and Status	Habitat	Date of last record	Likelihood of occurence
Southern Bent- wing Bat ( <i>Miniopterus</i> schreibersii bassanii) Critically Endangered	Roosts in caves during the day, dispersing over a range of habitats at night. Its feeding areas tend to be associated with major drainage systems.	28/10/2010	Habitat present and several recent records from the search region <b>- Likely to occur</b>
Grey-headed Flying-fox <i>(Pteropus poliocephalus)</i> Vulnerable	Roosts in riverine habitat in Melbourne and forages widely in flowering eucalypts and fruit trees.	N/A	Foraging habitat present - <b>Potential to</b> occur
Striped Legless Lizard <i>(Delma impar)</i> Vulnerable	Tussock grasslands on the volcanic plains, often associated with scattered rocks and cracked soils.	1/01/1989	Habitat present - Potential to occur
Dwarf Galaxias <i>(Galaxiella pusilla)</i> Vulnerable	Barwon River to Mitchell River. Vegetated margins of still water, ditches, swamps and backwaters of creeks, both ephemeral and permanent.	12/06/2008	Habitat present and one recent record from search region - <b>Potential to occur</b>
Growling Grass Frog <i>(Litoria raniformis)</i> Vulnerable	Permanent, still or slow flowing water with fringing and emergent vegetation in streams, swamps, lagoons and artificial wetlands such as farm dams and abandoned quarries.	1/11/1979	Habitat present - Potential to occur
Golden Sun Moth <i>(Synemon plana)</i> Critically Endangered	Areas that are, or have been native grasslands or grassy woodlands. It is known to inhabit degraded grasslands with introduced grasses being dominant, with a preference for the native wallaby grass being present.	N/A	Recorded east of the study area, <b>likely to</b> occur

#### Nature and extent of likely impact

Table 3 below outlines the nature and extent of the potential impacts on threatened species and ecological communities as presented in Tables 1 and 2 above from the construction and operation of the 36 poles of the transmission line (out of approximately 420 poles) that occur in areas with potential to support them.

Any affected area that potentially supports a listed threatened species or community (i.e. the 36 pole locations) will be assessed for the actual presence of those matters at a seasonally appropriate time. These findings will form the basis for implementing a mitigation strategy that aims to avoid significant impacts on MNES (see section 5). Therefore, the impacts tabled below represent a **base case** for potential MNES impacts and assume that all potential matters occur everwhere within the temporary disturbance areas and the permanent pole footings. They also assume that no strategy is in place to avoid these impacts; a situation that is clearly not the case given the statement above and the detailed strategies for avoiding significant ipmacts on these areas detailed later (section 5). The exact locations of these impacts are shown in the maps and tables at Attachment D. Temporary disturbance will not result in any long term reduction in the area of habitat, only permanent removal of the 2.5 m diameter power pole footing (see Section 1.4).

**Table 3** Threatened species and communities - extent of potential temporary and permament impact from pole footprints subject to procedures for avoidance of significant impacts.

Name	Nature and extent of likely temporary impact from pole construction
Natural Temperate Grassland of the Victorian Volcanic Plain (NTGVVP)	As a worst case scenario (i.e. if all potential NTGVVP habitat mapped was confirmed as NTGVVP and the maximum development footprint was disturbed), 0.260 hectares of NTGVVP would be disturbed for the proposed transmission line. Of this disturbance there is a maximum permanent removal of likely or present habitat of 0.013 ha.
Adamson's Blown- grass <i>(Lachnagrostis adamsonii)</i>	Maximum total area of habitat disturbance will be 0.200 ha. Of this disturbance there is a maximum permanent removal of likely or present habitat of 0.010 ha.
Clover Glycine (Glycine latrobeana)	Maximum total area of habitat disturbance will be 0.190 ha. Of this disturbance there is a maximum permanent removal of potential habitat of 0.009 ha.
Fragrant Leek- orchid (Prasophyllum suaveolens)	Maximum total area of habitat disturbance will be 0.180 ha. Of this disturbance there is a maximum permanent removal of potential habitat of 0.009 ha.
Maroon Leek-orchid (Prasophyllum frenchii)	Maximum total area of habitat disturbance will be 0.180 ha. Of this disturbance there is a maximum permanent removal of potential habitat of 0.009 ha.
Matted Flax-lily (Dianella amoena)	Maximum total area of habitat disturbance will be 0.180 ha. Of this disturbance there is a maximum permanent removal of potential habitat of 0.009 ha.
Spiny Peppercress (Lepidium aschersonii)	Maximum total area of habitat disturbance will be 0.190 ha. Of this disturbance there is a maximum permanent removal of potential habitat of 0.009 ha.
Spiny Rice-flower (Pimelea spinescens subsp. spinescens)	Maximum total area of habitat disturbance will be 0.280 ha. Of this disturbance there is a maximum permanent removal of potential habitat of 0.014 ha.
Trailing Hop-bush (Dodonaea procumbens)	Maximum total area of habitat disturbance will be 0.020 ha. Of this disturbance there is a maximum permanent removal of potential habitat of 0.001 ha.
White Sunray (Leucochrysum albicans var. tricolor)	Maximum total area of habitat disturbance will be 0.180 ha. Of this disturbance there is a maximum permanent removal of potential habitat of 0.009 ha.
Southern Bent-wing Bat <i>(Miniopterus</i> <i>schreibersii bassanii)</i> Grey-headed Flying- fox <i>(Pteropus</i> <i>poliocephalus)</i>	<ul> <li>These species are not considered to be susceptible to impacts by the current proposal for the following reasons.</li> <li>Negligible areas of habitat will be cleared, for power pole erection</li> <li>These species are highly mobile and are therefore able to flee from direct harm</li> <li>The current proposal will not affect the vulnerable aspects of their lifecycle or behaviour</li> </ul>
Striped Legless Lizard <i>(Delma impar</i> )	Maximum total area of habitat disturbance will be 0.260 ha. Of this disturbance there is a maximum permanent removal of potential habitat of 0.013 ha.
Dwarf Galaxias <i>(Galaxiella pusilla)</i>	This species is dependent upon permanent water, connectivity with permanent water or the presence of burrowing crayfish, whose burrows provide permanent aquatic microhabitat. As a result, the Dwarf Galaxias <b>is not considered to be susceptible to impacts</b> from the current proposal as the only wet areas potentially impacted upon (e.g. areas of plains grassy wetland) are prone to drying out and are not connected to permanent water courses. Further, there are no existing records of Burrowing Crayfish within the search region (VBA 2016).
Growling Grass Frog (Litoria raniformis)	Maximum total area of habitat disturbance will be 0.020 ha. Of this disturbance there is a maximum permanent removal of potential habitat of 0.001 ha.
Golden Sun Moth <i>(Synemon plana</i> )	Maximum total area of habitat disturbance will be 0.260 ha. Of this disturbance there is a maximum permanent removal of potential habitat of 0.013 ha.

**Table 4:** Maximum total area of potential of EPBC Act listed threatened communities and species habitat in the temporary

 disturbance and permanent removal footprints subject to procedures for avoidance of significant impacts.

Common Name	Total community or habitat area within transmission line study area (ha)	Area disturbed or removed (ha)	Percentage of pot. habitat in study area affected					
Flora								
	Flora							
NTGVVP	27.36	0.260	0.95%					
Adamson's Blown-grass	17.344	0.200	1.15%					
Clover Glycine	16.987	0.190	1.12%					
Fragrant Leek-orchid	14.022	0.180	1.28%					
Maroon Leek-orchid	14.022	0.180	1.28%					
Matted Flax-lily	14.022	0.180	1.28%					
Spiny Peppercress	15.644	0.190	1.21%					
Spiny Rice-flower	24.201	0.280	1.16%					
Trailing Hop-bush	0.933	0.020	2.17%					
White Sunray	14.022	0.180	1.28%					
	Fauna	1						
Striped Legless Lizard	26.055	0.260	0.95%					
Growling Grass Frog	6.935	0.020	1.15%					
Golden Sun Moth	26.055	0.260	1.12%					

The proposed development has the potential to affect one or more EPBC Act listed species and communities, as summarised in Tables 4 and 5. These impacts represent specifically up to 0.26 hectares of NTGVVP, up to between one and two percent of the potential habitat in the study area for up to nine listed threatened flora species and less than two percent of the potential habitat for three listed threatened fauna species.

The maximum extent of threatened community temporarily affected is about 2,600 square metres (0.260 hectare) of NTGVVP (less than 1 percent of the study are total). It is less than 2,000 square metres (0.200 hectares) for most threatened flora species potential habitat, with the exception of the Spiny Rice-flower, for which up to approximately 2800 square metres (0.28 hectares) of potential habitat may be affected. For fauna, 2600 square metres (0.260 hectares) of potential Striped Legless Lizard and Golden Sun Moth habitat will be affected and 200 square metres (0.02 hectares) of wetland that potentially supports the Growling Grass Frog. The permanent removal of native vegetation and/or fauna habitat will total approximately 180 square metres (i.e. 0.018 hectares) or 36 power pole footings, each about 4.9 square metres in extent (see photo in section 1.4 for example). As the available habitat in the study area (up to 25 hectares or more in some cases) is considered equally suited to these threatened species, the probability of a significant population impact on these species from the project is considered negligible.

In the absence of comprehensive targeted surveys of the alignment it is not possible to confirm the presence of this community and these species in the development footprint. This will be done before construction and any confirmed occurrences of any of these listed matters will result in the position of power poles being changed and the implementation of contruction phase site protection, as described in section 5 of this Referral to ensure any significant impact on them is avoided.

## 3.1 (e) Listed migratory species

#### Description

The EPBC Act Protected Matters Search results included a number of listed migratory species. These are shown in Table 5 below. Species considered likely to occur in the study area are highlighted in grey in this table.

**Table 5:** Listed migratory species from the EPBC Act Protected Matters Search Tool and their likelihood of occurrence in the study area. (Species likely to occur are highlighted in grey.)

Common Name	Scientific name	ЕРВС	Habitat	Number of records	Date of last record	Likelihood of occurrence
Cattle Egret	Ardea ibis	(JAMBA, CAMBA)	Wooded lands and terrestrial freshwater wetlands and pasture, in association with cattle (Marchant and Higgins 1990).	7	20/05/1978	Habitat present - Potential to occur
Common Greenshank	Tringa nebularia	(JAMBA, CAMBA, ROKAMBA, Bonn Convention (A2H))	Inhabits wide range of coastal or inland wetlands with varying levels of salinity; mainly muddy margins or rocky shores of wetlands (Higgins and Davies 1996).	5	17/01/1987	No habitat present - Unlikely to occur
Curlew Sandpiper	Calidris ferruginea	(JAMBA, CAMBA, ROKAMBA, Bonn Convention (A2H))	Inhabits wide range of coastal or inland wetlands with varying levels of salinity; mainly muddy margins or rocky shores of wetlands (Higgins and Davies 1996).	4	5/02/1988	No habitat present and no records from the search region - Unlikely to occur
Double- banded Plover	Charadrius bicinctus	(Bonn Convention (A2H))	Inhabits wide range of coastal or inland wetlands with varying levels of salinity; mainly muddy margins or rocky shores of wetlands (Marchant and Higgins 1993).	2	16/05/1987	No habitat present - <b>Unlikely to</b> occur
Eastern Great Egret	Ardea modesta	(JAMBA, CAMBA)	Occurs in a variety of wetlands including: permanent water bodies on flood plains; shallows of deep permanent lakes, either open or vegetated with shrubs or trees; semi-permanent swamps with tall emergent vegetation (e.g. bulrush) and herb dominated seasonal swamps with abundant aquatic flora (Marchant and Higgins 1990).	6	5/10/1977	No recent records - Unlikely to occur
Fork-tailed Swift	Apus pacificus	(JAMBA,CAMBA, ROKAMBA)	Aerial, over inland plains, sometimes above foothills or in coastal areas, over cliffs and urban areas (Higgins 1999).	None	N/A	No records from the search region - Unlikely to occur
Glossy Ibis	Plegadis falcinellus	(CAMBA, Bonn (A2S))	Prefer freshwater inland wetlands, in particular, permanent or ephemeral water bodies and swamps with abundant vegetation (Marchant and Higgins 1990).	1	18/10/1991	No habitat present - <b>Unlikely to</b> occur

Latham's Snipe	Gallinago hardwickii	(JAMBA, CAMBA, ROKAMBA, Bonn A2H)	Occurs in wide variety of permanent and ephemeral wetlands; it prefers open freshwater wetlands with dense cover nearby, such as the edges of rivers and creeks, bogs, swamps, waterholes (Naarding 1983; Higgins and Davies 1996).	3	9/01/1978	Habitat present - <b>Potential</b> to occur
Little Stint	Calidris minuta	(Rokamba)	Mudflats, sandflats, sheltered coastal estuaries, islets, freshwater lakes, lagoons and saltworks (Higgins and Davies 1996).	1	5/02/1988	No habitat present - Unlikely to occur
Rainbow Bee-eater	Merops ornatus	(JAMBA)	Usually in open or lightly timbered areas, often near water. Occur in partly cleared land such as farmland and in sand-dunes, both coastal and inland (Higgins 1999).	None	N/A	No habitat present - <b>Unlikely to</b> occur
Red-necked Stint	Calidris ruficollis	(JAMBA, CAMBA, ROKAMBA, Bonn Convention (A2H))	Inhabit shallow fresh to saline wetlands, usually coastal to near- coastal, but occasionally farther inland. Wetlands often have open fringing mudflats and low emergent or fringing vegetation (Higgins and Davies 1996).	4	16/05/1987	No habitat present - <b>Unlikely to</b> occur
Rufous Fantail	Rhipidura rufifrons	(Bonn Convention (A2H))	Primarily found in dense, moist habitats. Less often present in dry sclerophyll forests and woodlands (Higgins et al. 2006).	None	N/A	No habitat present - <b>Unlikely to</b> occur
Satin Flycatcher	Myiagra cyanoleuca	(Bonn Convention (A2H))	Tall forests and woodlands in wetter habitats but not in rainforest (Higgins et al. 2006)	None	N/A	No habitat present - Unlikely to occur
Sharp- tailed Sandpiper	Calidris acuminata	(JAMBA, CAMBA, ROKAMBA, Bonn Convention (A2H))	Inhabit shallow fresh to saline wetlands, usually coastal to near- coastal, but occasionally farther inland. Wetlands often have open fringing mudflats and low emergent or fringing vegetation (Higgins and Davies 1996).	10	2/12/1986	No habitat present - <b>Unlikely to</b> occur
White- bellied Sea- Eagle	Haliaeetus leucogaster	(CAMBA)	Maritime habitats, terrestrial large wetlands and coastal lands of tropical and temperate Australia and offshore islands, ranging far inland only over large rivers and wetlands (Marchant and Higgins 1993).	None	N/A	No habitat present - <b>Unlikely to</b> occur
White- throated Needletail	Hirundapus caudacutus	(JAMBA, CAMBA, ROKAMBA)	Aerial, over all habitats, but probably more over wooded areas, including open forest and rainforest. Often over heathland and less often above treeless areas such as grassland and swamps or farmland (Higgins 1999).	1	1/03/1903	No recent records - Unlikely to occur

Notes: EPBC = migratory status under the EPBC Act:

Bonn Convention (A2H) - Convention on the Conservation of Migratory Species of Wild Animals – listed as a member of a family

Bonn Convention (A2S) - Convention on the Conservation of Migratory Species of Wild Animals - species listed explicitly

CAMBA - China- Australia Migratory Birds Agreement

JAMBA - Japan-Australia Migratory Birds Agreement

ROKAMBA - Republic of Korea Australia Migratory Birds Agreement.

This analysis indicates that two listed migratory fauna species are likely to occur or have the potential to occur. These species are listed below.

- Cattle Egret
- Latham's Snipe

#### Nature and extent of likely impact

Migratory species **are not considered to be significantly impacted** by the current proposal for the following reasons:

- Negligible areas of habitat will be cleared for power pole erection
- These species are highly mobile and are therefore able to move away from temporary disturbance during construction and will return after works cease.
- The current proposal will not affect the vulnerable aspects of their lifecycle or behaviour, asoutlined below.

The vulnerable stage of the Cattle Egret's life cycle is during breeding/nesting. This species nests in foliage in swampy woodlands and no such habitat exists and no confirmed Cattle Egret breeding sites exist close to the transmission line. Significant impacts on this species are therefore unlikely.

The vulnerable stage of the Latham's Snipe's life cycle is during breeding/nesting and during pre-migratory fattening in late summer. This species migrates to Japan and eastern Russia to breed so breeding season iompacts are not possible. Theere is no extensive suitable habtait for the Lathams Snipe near the proposed transmission line, so impacts on pre-migratory fattening are therefore unlikely.

#### 3.1 (f) Commonwealth marine area

(If the action is <u>in</u> the Commonwealth marine area, complete 3.2(c) instead. This section is for actions taken outside the Commonwealth marine area that may have impacts on that area.)

#### Description

There are no Commonwealth marine areas impacted within 10km of the proposal (DotE 2015b).

#### Nature and extent of likely impact

There are no direct or indirect impacts on any part of the environment in the Commonwealth marine area.

#### 3.1 (g) Commonwealth land

(If the action is on Commonwealth land, complete 3.2(d) instead. This section is for actions taken outside Commonwealth land that may have impacts on that land.)

#### Description

The proposed action is not on Commonwealth land nor will it impact on Commonwealth land.

#### Nature and extent of likely impact

There will be no impact to Commonwealth land

#### 3.1 (h) The Great Barrier Reef Marine Park

#### Description

The proposal will not impact on the Great Barrier Reef Marine Park.

#### Nature and extent of likely impact

There is no direct or indirect impact on any part of the environment of the Great Barrier Reef Marine Park.

#### 3.1 (i) A water resource, in relation to coal seam gas development and large coal mining development

#### Description

The proposed action is not a coal seam gas development or large coal mining development.

#### Nature and extent of likely impact

Not applicable.

# 3.2 Nuclear actions, actions taken by the Commonwealth (or Commonwealth agency), actions taken in a Commonwealth marine area, actions taken on Commonwealth land, or actions taken in the Great Barrier Reef Marine Park

is the proposed action a nuclear action?	X	No			
		Yes (provide details below)			
If yes, nature & extent of likely impact on the whole environment					
s the proposed action to be taken by the Commonwealth or a Commonwealth	Х	No			
agency?		Yes (provide details below)			
if yes, nature & extent of likely impact on	yes, nature & extent of likely impact on the whole environment				
		No			
s the proposed action to be taken in a	X	110			
is the proposed action to be taken in a Commonwealth marine area?	X	Yes (provide details below)			
		Yes (provide details below)			
Commonwealth marine area? If yes, nature & extent of likely impact on is the proposed action to be taken on		Yes (provide details below)			
Commonwealth marine area?	the who	Yes (provide details below) le environment (in addition to 3.1(f)			
Commonwealth marine area? If yes, nature & extent of likely impact on is the proposed action to be taken on	the who	Yes (provide details below) le environment (in addition to 3.1(f) No Yes (provide details below)			
Commonwealth marine area? If yes, nature & extent of likely impact on is the proposed action to be taken on Commonwealth land?	the who	Yes (provide details below) le environment (in addition to 3.1(f) No Yes (provide details below)			
Commonwealth marine area? If yes, nature & extent of likely impact on is the proposed action to be taken on Commonwealth land?	the who	Yes (provide details below) le environment (in addition to 3.1(f) No Yes (provide details below)			

## 3.3 Other important features of the environment

#### 3.3 (a) Flora and fauna

The study area has been largely cleared of native vegetation. However a number of the public roadsides within these parts of the study area supported moderate to very high-quality native grasslands and grassy wetlands, largely present due to the protection from agricultural activity. The formed roads in these road reserves were generally raised with a weedy embankment on each side. Some of the adjacent table-drains supported native grassland or wetland vegetation and cleared bare-earth fire breaks had been established along many road reserves which abutt adjacent private properties. No significant fauna was discovered during within the study area however habitat was determined to occur as discussed in 3.1 (d).

#### 3.3 (b) Hydrology, including water flows

The study area contains few hydrological features except Salt Creek and Stony Creek, which intersect the project area. Salt Creek is a large creek extending along the far edge of the Dundas Tablelands bioregion north of the study area. It continues south west, roughly parallel with the northern part of the study area. The transmission line alignment area crosses this creekline south of the Hamilton Highway. The creek is fed by secondary drainage throughout the area, joining the Hopkins River to the south west. Stony Creek and couoplke of other minor drainage lines also cross the project area between here and Terang.

#### 3.3 (c) Soil and Vegetation characteristics

The area of activity falls within the Glenelg-Hopkins catchment and the Victorian Volcanic Plain bioregion. This area is characterised by flat to undulating basaltic plains, consisting of reddish-brown to black loams and clays. Roadsides on plains above the river valley (to the west of Salt Creek) support high-quality indigenous grassland and woodland vegetation. The rocky escarpments support some scattered indigenous shrubs over otherwise mostly weedy vegetation. The riparian zones support some moderate quality semi-aquatic herbaceous vegetation, while the defined creek channel was filled with Water Ribbons and lined with River Red-gums.

Many of the public roadsides within these parts of the study area support moderate to very high-quality native grasslands and grassy wetlands. The formed roads in these road reserves were generally raised with a weedy embankment on each side. Some of the adjacent table-drains support native grassland or wetland vegetation and cleared bare-earth fire breaks had been established along many road reserve edges which abutted adjacent private properties.

#### 3.3 (d) Outstanding natural features

There are no features of outstanding natural value identified in the study area.

#### 3.3 (e) Remnant native vegetation

The landscape comprised fairly flat to very gently undulating land typical of older (i.e. more eroded) and/or less viscous lava flows. The highest point of elevation is 177 metres above sea level (ASL) in the northern section of the alignment and 131 metres ASL in the centre of the alignment. The gradient is slightly steeper along the banks of the Salt Creek compared to the surrounding environment. The vast majority of the transmission line alignment is dominated by cleared agricultural land that does not support native vegetation, or roadside reserve dominated by exotic grasses and other weeds.

A total of 28 Native Vegetation Sites—ranging from very low to very high general quality—were recorded in the study area (see BL&A 2016a, Attachment B). Five portions of the transmission, line pass through mostly roadside native vegetation of varying quality. These areas represent between 10 and 15 percent of the length of the transmission line.

These Native Vegetation Sites within the study area were found to support (or potentially support) the following Ecological Vegetation Classes (EVCs):

- Plains Grassy Woodland (EVC 55\_61)
- Floodplain Riparian Woodland (EVC 56)
- Creekline Grassy Woodland (EVC 68)
- Plains Grassy Wetland (EVC 125)
- Heavier-soils Plains Grassland (EVC 132\_61)

- Cinder Cone Woodland (EVC 644)
- Aquatic Herbland (EVC 653)

Any removal of native vegetation will be done consistent with the requirements of Clause 52.17 of the Moyne Shire Planning Scheme, which requires a planning permit for the removal of native vegetation (see Section 2.4).

#### 3.3 (f) Gradient (or depth range if action is to be taken in a marine area)

The landform is gently undulating, however the gradient is general sloping from approximately 175m AHD to 140m AHD in the south.

#### 3.3 (g) Current state of the environment

The majority of the environment in the surrounding region is agricultural. Most of that is farmland used for grazing sheep and cattle that is dominated by introduced grass species. These areas often undergo pasture improvement management techniques. Cereal crops are also grown in the region.

The environment has therefore been highly modified to support agricultural activities. Land has been largely cleared of native vegetation. Significant environmental values are restricted to small ecological communities along road verges or indispersed in patches within some grazed areas.

#### 3.3 (h) Commonwealth Heritage Places or other places recognised as having heritage values

The proposed action does not impact on Commonwealth Heritage Places or any other places recognised as having heritage values.

#### 3.3 (i) Indigenous heritage values

A Cultural Heritage Management Plan (CHMP 14295), in accordance with the Aboriginal Heritage Act 2006 is currently being prepared for the proposed action. This next stage will be conducted in partnership with Martang and Eastern Maar who will assist with fieldwork and developing further recommendations for the project to enable appropriate protection and management of Aboriginal Places in the activity area.

Through survey of the activity area with respective Aboriginal groups, it was determined that further archaeological subsurface testing is required in areas of potential archaeological deposit. There have been five site locations identified where sub-surface testing is to occur.

#### 3.3 (j) Other important or unique values of the environment

There are no other important or unique values of the environment identified within the study area.

#### 3.3 (k) Tenure of the action area (eg freehold, leasehold)

The tenure of the action area is freehold and Crown land (road reserves).

#### 3.3 (I) Existing land/marine uses of area

Predominant land uses on private land across this study area comprised stock grazing and cropping. Roadsides had been managed through fire-reduction burning, slashing and/or periodic stock grazing.

Other than to support the transmission line, land will continue to be used for agriculture and managed as road reserves.

#### 3.3 (m) Any proposed land/marine uses of area

There are not proposed land/marine uses of area.

# **4 Environmental outcomes**

An ecological assessment was conducted by BL&A to assess any likely impacts to MNES due to the proposed action.

The significant impact criteria for threatened species and listed communities based on the Significant Impact Guidelines 1.1 of the Department of the Environment (DoE 2013) or individual significant impact guidelines in policy statements for Spiny Rice-flower, Golden Sun Moth and Growling Grass Frog are listed below.

In all cases described below, it has been assumed that confirmed habitat would be removed but that as a consequence of the mitigation measures described in section 5 of this Referral, no individuals of the species would be removed. Wherever possible, pole positions will be adjusted and construction works planned and implemented to avoid any confirmed area of NTGVVP.

#### Endangered species - Adamson's Blown-grass, Fragrant Leek-orchid, Maroon Leek-orchid, Matted Flax-lily, White Sunray, Striped Legless Lizard

An action is likely to have a significant impact on a critically endangered or endangered species if there is a real chance or possibility that it will:

- lead to a long-term decrease in the size of a population
- reduce the area of occupancy of the species
- fragment an existing population into two or more populations
- adversely affect habitat critical to the survival of a species
- disrupt the breeding cycle of a population
- modify, destroy, remove, isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline
- result in invasive species that are harmful to a critically endangered or endangered species becoming established in the endangered or critically endangered species' habitat
- introduce disease that may cause the species to decline, or
- interfere with the recovery of the species.

The permanent removal of 180 square metres (0.018 hectares) of habitat for these species will not result in a significant impact on these species. In the unlikely event that a large population is recorded within a road reserve during targeted surveys making it impossible to avoid all impacts on this species, removing 4.9 square metres per pole location intersecting with this area would not reduce the area of occupancy of these species significantly or result in impacts that met any of the other criteria mentioned above.

#### Vulnerable species - Clover Glycine, Spiny Pepper-cress, Trailing Hop-bush

An action is likely to have a significant impact on a vulnerable species if there is a real chance or possibility that it will:

- lead to a long-term decrease in the size of an important population of a species
- reduce the area of occupancy of an important population
- fragment an existing important population into two or more populations
- adversely affect habitat critical to the survival of a species
- disrupt the breeding cycle of an important population
- modify, destroy, remove or isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline
- result in invasive species that are harmful to a vulnerable species becoming established in the vulnerable species' habitat
- introduce disease that may cause the species to decline, or interfere substantially with the recovery of the species.

An 'important population' is a population that is necessary for a species' long-term survival and recovery. This may include populations identified as such in recovery plans, and/or that are:

- key source populations either for breeding or dispersal
- populations that are necessary for maintaining genetic diversity, and/or
- populations that are near the limit of the species range.

The permanent removal of 180 square metres (0.018 hectares) of habitat for these species will not result in a significant impact on these species. In the unlikely event that a large population is recorded within a road reserve making it impossible to avoid all impacts on these species, removing 4.9 square metres per pole location intersecting with this area would not reduce the area of occupancy of an important population or result in impacts that met any of the other criteria mentioned above.

#### Spiny Rice-flower

The significant impact guidelines for the critically endangered Spiny Rice-flower (DoE 2009a) include the following thresholds for a significant impact:

- Any fragmentation of a population
- The loss of >5 individuals
- Any loss of individuals from any population which occurs on the edge of the Spiny Rice-flower's current known distribution.

The study area does not lie on the edge of the Spiny Rice-flower's known current distribution and the placement of powerpoles will not lead to the fragmentation of any population, should it be recorded during targeted surveys. The implementation of the environmental management measures described in Section 5 will ensure that no more than 5 individuals will be removed through micrositing of pole locations during the pre-construction planning and assessment process.

#### Golden Sun Moth

The significant impact guidelines for the critically endangered Golden Sun Moth (DoE, 2009b) include the following thresholds for a significant impact:

- Habitat loss, degradation or fragmentation > 0.5 ha for large or contiguous habitat (>10 ha)
- Any habitat loss, degradation or fragmentation for small or fragmented habitat area (<10 ha)
- Fragmentation of a population through the introduction of a barrier to dispersal

The recorded potential habitat within the study area is about 27 hectares spread among a number of areas (see Attachment D). The area of disturbance is less than 0.5 hectare and no more than 0.018 hectares of potential habitat will be permanently removed. This will not result in an impact that prejudices the future survival in the potential habitat of the species should any be present.

#### Growling Grass Frog

The significant impact guidelines for the vulnerable Growling Grass Frog (DoE, 2009c) include the following thresholds for a significant impact:

- Habitat degradation in an area supporting an important population
- Isolation and fragmentation of populations

About 0.03 hectares of potential wetland habitat for this species will be disturbed. This will not result in habitat degradation in an area supporting an important population or lead to an isolation or fragmentation of populations.

The assessment has determined that there will be no significant impact on matters of national environmental significance if the action is carried out in accordance with particular manner measures as described in Section 5 below, designed to avoid significant impacts on MNES. These measures have been developed to prevent the proposed action from having a significant impact on MNES.

# 5 Measures to avoid or reduce impacts

Of the 420 power poles proposed, 36 have the potential to impact on MNES. The avoidance of impacts to any likely occurrence of MNES will be achieved through the siting of transmission line infrastructure to avoid such areas. This has been possible due to the flexibility in transmission line siting and ecological assessment which has informed the selection of pole locations and related infrastructure. Further targeted surveys will ensure this occurs.

The following measures have been undertaken in the siting of the transmission line alignment and design.

- Two general alignment options have been investigated. The earlier eastern transmission line alignment has been abandoned and this western option which has less impact on native vegetation and Matters of Environmental Significance (see BL&A 2016a) is subject to the action;
- The proposed transmission line has been designed to minimise biodiversity impacts, particularly to native vegetation and listed ecological communities, through the adoption of the following specific design measures.
- A number of further finer-scale realignments have been made to the design to reduce impacts upon native vegetation and important habitats;
- Target power pole spacings have been increased from approximately 100 metres to 250 metres within areas of native vegetation to reduce the number of poles required and resulting disturbance footprint; and
- Where possible, the indicative pole locations have been positioned to avoid native vegetation and threatened species and will be further micro-sited during detailed design prior to construction. This will minimise the impact on native vegetation and threatened species.

In addition to the siting of the transmission line alignment the proponent has undertaken, in consulation with engineering and ecological specialists, further work to develop specific management guidelines for the preconstruction and construction phases of the transmission line (Attachment E). These management guidelines will:

- Establish detailed and targeted survey regimes around the construction footprints of the power poles
- Provide further input into the micro-siting of power poles
- Ensure that micro-siting and adequate coordination of span lengths avoids areas of threatened communities and species where they are determined to occur.

The management guidelines also provide further direction for construction techiques to mitigate any impacts to MNES not otherwise identified. These include but are not limited to:

- Pre clearing works where required are undertaken manually
- Where appropriate ground vegetation protection will be additionally utilised to minimise temporary construction impacts to species in accordance with best practice.
- Construction to take place from existing disturbed road verges, where possible.

It is considered that the siting of the transmission line (to avoid impacts to MNES) and the establishment of detailed management measures (to avoid further impacts to MNES where they are determined to occur within the construction footprint) the proposed action is not a controlled action, subject to the action being undertaken in a particular manner being in accordance with the *Salt Creek Wind Farm Transmission line construction – MNES habitat impact and management guidelines 2016* that form Attachment E and the suggested particular manner conditions at Attachment F.

# 6 Conclusion on the likelihood of significant impacts

6.1 Do you THINK your proposed action is a controlled action?

No, complete section 5.2

Yes, complete section 5.3

# 6.2 Proposed action IS NOT a controlled action.

The area subject to the proposed action is highly modified from its natural state.

The amount of land permamently impacted on by construction of the transmission line is 0.273 hectares for the whole alignment. Within areas with the potential for MNES to occur the extent land permamently impacted on for transmission line foundations is 0.018 hectares. Additionally this area will be subject to further detailed target assessment, as described in Section 5 and Attachment E and pole locations will be moved in the event that a MNES is present. Works will also be subject to strict construction guidelines designed to prevent significant impacts on MNES should they be found in the limited affected area (see Attachment E).

As a result of construction of the transmission line being conducted in the particular manner proposed, the action:

- will not result in the removal of a substantial area of NTGVVP;
- will not lead to a long- term decrease in size of any listed threatened or migratory species' populations;
- will ensure the vast majority of potential habitat will remain available for MNES species and communities;
- will not fragment any existing populations due to the very localised nature of construction; and
- will not disrupt the breeding cycle or any other critical phase of the life cycle of a threatened or migratory species' population.

Threatened species and communities are highly unlikely to decline as a result of the proposed action. Every effort has been made to avoid impacts on native vegetation and threatened species habitat, primarily through the choice of the lowest impact alignment option, as well as the commitment to strict construction protocols and procedures designed to avoid significant impacts on MNES.

Any native vegetation removed as part of the exercise for installing the power poles will be offset in accordance with the Victorian native vegetation planning provisions.

It is therefore considered that the proposed transmission line will not have a significant impact on MNES. Any potential for impacts on MNES, however unlikely, have been specifically addressed in the guidelines and recommendations arising from the thorough ecological assessment with input from transmission line design engineers (see Attachment E).

It is determined that, provided the action is undertaken in the particular manner, as described in Section 5 and Attachment E, the action is deemed not to be a controlled action as there will not be significant impacts on MNES.

## 6.3 Proposed action IS a controlled action

#### Matters likely to be impacted

World Heritage values (sections 12 and 15A)
National Heritage places (sections 15B and 15C)
Wetlands of international importance (sections 16 and 17B)
Listed threatened species and communities (sections 18 and 18A)
Listed migratory species (sections 20 and 20A)
Protection of the environment from nuclear actions (sections 21 and 22A)
Commonwealth marine environment (sections 23 and 24A)
Great Barrier Reef Marine Park (sections 24B and 24C)
A water resource, in relation to coal seam gas development and large coal mining development (sections 24D and 24E)

	Protection of the environment from actions involving Commonwealth land (sections 26 and 27A)
	Protection of the environment from Commonwealth actions (section 28)
	Commonwealth Heritage places overseas (sections 27B and 27C)

# **7** Environmental record of the responsible party

-

Does the party taking the action have a satisfactory record of responsible	Yes	No
environmental management?		
Provide details		
TrustPower is one of New Zealand's largest electricity generators, with 36 hydro power stations and wind farms in New Zealand and Australia. As a consequence, the company acknowledges a direct and significant interrelationship with all aspects of the environment.		
In this respect, the company:	х	
<ul> <li>Uses and, in many instances, modifies natural resources to generate electricity</li> <li>Owns, maintains and enhances/expands a network of significant physical resources</li> <li>Supplies an essential service to commercial and domestic consumers, which in turn enables these parties to provide for their social and economic well being</li> </ul>	X	
TrustPower's goal is to operate in a manner that maximises all potential positive environmental effects, while minimising the incidence and source of negative (or adverse) effects. To achieve this, all of TrustPower's actions that may affect the environment are governed by the policies outlined in Section 7.3 below.		
Has either (a) the party proposing to take the action, or (b) if a permit has been applied for in relation to the action, the person making the application - ever been subject to any proceedings under a Commonwealth, State or Territory law for the protection of the environment or the conservation and sustainable use of natural resources? If yes, provide details		×
If the party taking the action is a corporation, will the action be taken in accordance with the corporation's environmental policy and planning framework?		
with the corporation's environmental policy and planning framework?		
<ul> <li>with the corporation's environmental policy and planning framework?</li> <li>If yes, provide details of environmental policy and planning framework</li> <li>Trustpower is committed to managing its operations in a legally compliant and environmentally responsible manner. This environmental policy outlines how Trustpower will achieve its commitments.</li> <li>To comply with all of the legal environmental obligations of the jurisdictions in which Trustpower operates;</li> </ul>		
<ul> <li>with the corporation's environmental policy and planning framework?</li> <li>If yes, provide details of environmental policy and planning framework</li> <li>Trustpower is committed to managing its operations in a legally compliant and environmentally responsible manner. This environmental policy outlines how Trustpower will achieve its commitments.</li> <li>To comply with all of the legal environmental obligations of the jurisdictions in which Trustpower operates;</li> <li>To ensure our activities do not lead to environmental pollution in the areas in which Trustpower operates;</li> </ul>	×	
<ul> <li>with the corporation's environmental policy and planning framework?</li> <li>If yes, provide details of environmental policy and planning framework</li> <li>Trustpower is committed to managing its operations in a legally compliant and environmentally responsible manner. This environmental policy outlines how Trustpower will achieve its commitments.</li> <li>To comply with all of the legal environmental obligations of the jurisdictions in which Trustpower operates;</li> <li>To ensure our activities do not lead to environmental pollution in the areas in which Trustpower operates;</li> <li>To promote the continual improvement of environmental performance and environmental awareness;</li> </ul>	x	
<ul> <li>with the corporation's environmental policy and planning framework?</li> <li>If yes, provide details of environmental policy and planning framework</li> <li>Trustpower is committed to managing its operations in a legally compliant and environmentally responsible manner. This environmental policy outlines how Trustpower will achieve its commitments.</li> <li>To comply with all of the legal environmental obligations of the jurisdictions in which Trustpower operates;</li> <li>To ensure our activities do not lead to environmental pollution in the areas in which Trustpower operates;</li> <li>To promote the continual improvement of environmental performance and environmental awareness;</li> <li>To understand how our business activities impact on our stakeholders and to respond appropriately;</li> </ul>	x	
<ul> <li>with the corporation's environmental policy and planning framework?</li> <li>If yes, provide details of environmental policy and planning framework</li> <li>Trustpower is committed to managing its operations in a legally compliant and environmentally responsible manner. This environmental policy outlines how Trustpower will achieve its commitments.</li> <li>To comply with all of the legal environmental obligations of the jurisdictions in which Trustpower operates;</li> <li>To ensure our activities do not lead to environmental pollution in the areas in which Trustpower operates;</li> <li>To promote the continual improvement of environmental performance and environmental awareness;</li> <li>To understand how our business activities impact on our stakeholders and to respond</li> </ul>	x	

7.4	Has the party taking the action previously referred an action under the EPBC Act, or been responsible for undertaking an action referred under the EPBC Act?		
	Provide name of proposal and EPBC reference number (if known)		
	TrustPower Limited/Energy (Renewable) & Infrastructure/Sellicks Hill Range/SA/Wind Farm (Ref: 2001/519)		
	Wind Prospect Pty Ltd & TrustPower Limited/Energy generation and supply/Barunga Gap/SA/Barunga Wind Farm (Ref: 2004/1357)		
	Snowtown Wind Farm Pty Ltd/Energy Generation and Supply (renewable)/Snowtown/South Australia/Development of a wind energy facility and supporting infrastructure, Snowtown (Ref: 2009/5073)	Х	
	NEWEN AUSTRALIA PTY LTD/Energy Generation and Supply (renewable)/Dundonnell/Victoria/Dundonnell Wind Farm, VIC (Ref: 2012/6557)		
	Rye Park Wind Farm Pty Ltd/Energy Generation and Supply (renewable)/Rye Park, NSW/New South Wales/Rye Park Wind Farm, (N of Yass, SE of Boorowa), NSW (Ref: 2014/7163)		

# 8 Information sources and attachments

(For the information provided above)

## 8.1 References

Brett Lane and Associated (2016) Salt Creek Wind Farm Transmission line – Biodiveristy Assessment Report No. 15101 (6.2)

Department of the Enviroment (2015a). Australia's World Heritage List. Australian Government, Canberra. Accessed 13/07/2016 http://www.environment.gov.au/heritage/places/world-heritage-list

Department of the Environment (2015b). Commonwealth marine reserves. Australian Government, Canberra. Accessed 13/07/2016 <u>http://www.environment.gov.au/topics/marine/marine-reserves</u>

## 8.2 Reliability and date of information

The information in this Referral was taken from the following.

- EPBC Protected Matters Search, dated January 2016
- Victorian Biodiversity Atlas (Victorian Department of Environment, Land, Water and Planning)
- Field surveys for flora and fauna conducted in September and November 2015, and April 2016, and BL&A report written in May 2016.
- The reliability of the information is very high, being based on field assessments of the entire transmission line alignment by qualified BL&A ecologists, including detailed GPS mapping of the extent of native vegetation and assessment of the quality and attributes of that vegetation as a basis for judging the likelihood of it being suitable for all relevant MNES.

## 8.3 Attachments

		$\checkmark$	
		attached	Title of attachment(s)
You must attach	figures, maps or aerial photographs showing the project locality (section 1)		Attachment A: Oveview and Locality Map Shapefile of the proposed
	GIS file delineating the boundary of the referral area (section 1)	~	transmission line Shapefiles SCWF_Txl_datatoDOTEE_ 160801
	figures, maps or aerial photographs showing the location of the project in respect to any matters of national environmental significance or important features of the environments (section 3)	~	See Attachment A: Oveview and Locality Map
If relevant, attach	copies of any state or local government approvals and consent conditions (section 2.5)		
	copies of any completed assessments to meet state or local government approvals and outcomes of public consultations, if available (section 2.6)		
	copies of any flora and fauna investigations and surveys (section 3)	~	Attachment B: Salt Creek Wind Farm transmission line–biodiversity assessment. (Report No BL&A 15101(6.4)).

		Attachment C: Salt Creek Wind Farm transmission line options – overview of biodiversity impacts. (Report No BL&A 15101(5.0)). Attachment D: Map showing where impacts on potential MNES might occur.
technical reports relevant to the assessment of impacts on protected matters that support the arguments and conclusions in the referral (section 3 and 4)	✓	Attachment E: Salt Creek Wind Farm Transmission line construction – MNES impact and management guidelines Attachment F: Proposed particular manner conditions
report(s) on any public consultations undertaken, including with Indigenous stakeholders (section 3)		

# 9 Contacts, signatures and declarations

## **Project title:**

#### 9.1 Person proposing to take action

1. Name and Title:

Chris Righetti - Wind Development Project Manager

2. Organisation (if applicable):

Salt Creek Wind Farm Pty Ltd

3. EPBC Referral Number (if known):

4: ACN / ABN (if applicable): 121 087 492

5. Postal address 26 Greenhill Road, Wayville, South Australia, 5034

6. Telephone: 03 9654 3066

7. Email: chris.righetti@trsutpower.com.au

8. Name of proposed proponent (if not the same person at item 1 above and if applicable):
9. ACN/ABN of proposed proponent (if not the same person named at item 1 above):

# COMPLETE THIS SECTION ONLY IF YOU QUALIFY FOR EXEMPTION FROM THE FEE(S) THAT WOULD OTHERWISE BE PAYABLE

I qualify for exemption from fees under section 520(4C)(e)(v) of the EPBC Act because I am: not applicable.

If you are small business entity you must provide the Date/Income Year that you became a small business entity:

Note: You must advise the Department within 10 business days if you cease to be a small business entity. Failure to notify the Secretary of this is an offence punishable on conviction by a fine (regulation 5.23B(3) *Environment Protection and Biodiversity Conservation Regulations 2000* (Cth)).

#### COMPLETE THIS SECTION ONLY IF YOU WOULD LIKE TO APPLY FOR A WAIVER

I would like to apply for a waiver of full or partial fees under Schedule 1, 5.21A of the <u>EPBC</u>

not applicable.

5.21A of the EPBC Regulations. 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: Declaration

I declare that to the best of my knowledge the information I have given on, or attached to this form is complete, current and correct.

I understand that giving false or misleading information is a serious offence.

I agree to be the proponent for this action.

I declare that I am not taking the action on behalf of or for the benefit of any other person or entity.

3/16 Date 2 Signature

9.2	<b>Person preparing the referral information (if different from 9.1)</b> This Referral has benefited from a thorough internal review by Phil Burn of Jacobs. Full responsibility for the content of this Referral is taken by the person below.		bs. Full responsibility for
	Name	Brett Lane	
	Title	Director	
	Organisation Brett Lane & Associates Pty Ltd		
	ACN 095 541 334 ACN 095 541 334		
	Postal address	P O Box 337, Camberwell, Vic. 3124	/
201 00 10 10 10 10 10 10 10 10 10 10 10 1	Telephone	(03) 9815 2111	
	Email	blane@ecologicalresearch.com.au	
	Declaration I declare that to the best of my knowledge the information I have given on, o to this form is complete, current and correct. I understand that giving false or misleading information is a serious offence.		
	Signature	Butt	9 <sup>th</sup> August 2016

# **REFERRAL CHECKLIST**

NOTE: This checklist is to help ensure that all the relevant referral information has been provided. It is not a part of the referral form and does not need to be sent to the Department.

HAVE YOU:	
	Completed all required sections of the referral form?
	Included accurate coordinates (to allow the location of the proposed action to be mapped)?
	Provided a map showing the location and approximate boundaries of the project area?
	Provided a map/plan showing the location of the action in relation to any matters of NES?
	Provided a digital file (preferably ArcGIS shapefile, refer to guidelines at <u>Attachment A</u> ) delineating the boundaries of the referral area?
	Provided complete contact details and signed the form?
	Provided copies of any documents referenced in the referral form?
	Ensured that all attachments are less than three megabytes (3mb)?
	Sent the referral to the Department (electronic and hard copy preferred)?

## Attachment A

## Geographic Information System (GIS) data supply guidelines

If the area is less than 5 hectares, provide the location as a point layer. If the area greater than 5 hectares, please provide as a polygon layer. If the proposed action is linear (eg. a road or pipline) please provide a polyline layer.

GIS data needs to be provided to the Department in the following manner:

- Point, Line or Polygon data types: ESRI file geodatabase feature class (preferred) or as an ESRI shapefile (.shp) zipped and attached with appropriate title
- Raster data types: Raw satellite imagery should be supplied in the vendor specific format.
- Projection as GDA94 coordinate system.

Processed products should be provided as follows:

- For data, uncompressed or lossless compressed formats is required GeoTIFF or Imagine IMG is the first preference, then JPEG2000 lossless and other simple binary+header formats (ERS, ENVI or BIL).
- For natural/false/pseudo colour RGB imagery:
  - If the imagery is already mosaiced and is ready for display then lossy compression is suitable (JPEG2000 lossy/ECW/MrSID). Prefer 10% compression, up to 20% is acceptable.
  - If the imagery requires any sort of processing prior to display (i.e. mosaicing/colour balancing/etc) then an uncompressed or lossless compressed format is required.

Metadata or 'information about data' will be produced for all spatial data and will be compliant with ANZLIC Metadata Profile. (<u>http://www.anzlic.org.au/policies\_guidelines#guidelines</u>).

The Department's preferred method is using ANZMet Lite, however the Department's Service Provider may use any compliant system to generate metadata.

All data will be provide under a Creative Commons license (<u>http://creativecommons.org/licenses/by/3.0/au/</u>)