REFERRAL OF A PROJECT FOR A DECISION ON THE NEED FOR ASSESSMENT UNDER THE *ENVIRONMENT EFFECTS ACT 1978*

REFERRAL FORM

The *Environment Effects Act 1978* provides that where proposed works may have a significant effect on the environment, either a proponent or a decision-maker may refer these works (or project) to the Minister for Planning for advice as to whether an Environment Effects Statement (EES) is required.

This Referral Form is designed to assist in the provision of relevant information in accordance with the *Ministerial Guidelines for assessment of environmental effects under the Environment Effects Act 1978* (Seventh Edition, 2006). Where a decision-maker is referring a project, they should complete a Referral Form to the best of their ability, recognising that further information may need to be obtained from the proponent.

It will generally be useful for a proponent to discuss the preparation of a Referral with the Department of Planning and Community Development (DPCD) before submitting the Referral.

If a proponent believes that effective measures to address environmental risks are available, sufficient information could be provided in the Referral to substantiate this view. In contrast, if a proponent considers that further detailed environmental studies will be needed as part of project investigations, a more general description of potential effects and possible mitigation measures in the Referral may suffice.

In completing a Referral Form, the following should occur:

- Mark relevant boxes by changing the font colour of the 'cross' to black and provide additional information and explanation where requested.
- As a minimum, a brief response should be provided for each item in the Referral Form, with a more detailed response provided where the item is of particular relevance. Cross-references to sections or pages in supporting documents should also be provided. Information need only be provided once in the Referral Form, although relevant cross-referencing should be included.
- Responses should honestly reflect the potential for adverse environmental effects. A Referral will only be accepted for processing once DPCD is satisfied that it has been completed appropriately.
- Potentially significant effects should be described in sufficient detail for a reasonable conclusion to be drawn on whether the project could pose a significant risk to environmental assets. Responses should include:
    - a brief description of potential changes or risks to environmental assets resulting from the project;
    - available information on the likelihood and significance of such changes;
    - the sources and accuracy of this information, and associated uncertainties.
- Any attachments, maps and supporting reports should be provided in a secure folder with the Referral Form.
- A CD or DVD copy of all documents will be needed, especially if the size of electronic documents may cause email difficulties. **Individual documents should not exceed 2MB.**

- A completed form would normally be between 15 and 30 pages in length. Responses should not be constrained by the size of the text boxes provided. Text boxes should be extended to allow for an appropriate level of detail.
- The form should be completed in MS Word and not handwritten.

The party referring a project should submit a covering letter to the Minister for Planning together with a completed Referral Form, attaching supporting reports and other information that may be relevant. This should be sent to:

Postal address

Minister for Planning
PO Box 500
EAST MELBOURNE VIC 3002

Couriers

Minister for Planning
Level 17, 8 Nicholson Street
EAST MELBOURNE VIC 3002

In addition to the submission of the hardcopy to the Minister, separate submission of an electronic copy of the Referral via email to ees.referrals@dpcd.vic.gov.au is encouraged. This will assist the timely processing of a referral.

PART 1 PROPONENT DETAILS, PROJECT DESCRIPTION & LOCATION

1. Information on proponent and person making Referral

Name of Proponent:	The Sisters Wind Farm Pty Ltd
Authorised person for proponent: **Position:** **Postal address:** **Email address:** **Phone number:** **Facsimile number:**	Alistair Wilson Director 608/31 Spring St Melbourne 3000 awilson@windfarmdevelopments.net 03 9639 9290 03 9639 3146
Person who prepared Referral: **Position:** **Organisation:** **Postal address:** **Email address:** **Phone number:** **Facsimile number:**	Laura Bassed Project Planner Wind Farm Developments 608/31 Spring St Melbourne 3000 lbassed@windfarmdevelopments.net 03 9639 9290 03 9639 3146
Available industry & environmental expertise: (areas of 'in-house' expertise & consultancy firms engaged for project)	**Ecology**: Parsons Brinckerhoff; **Visual**: Wax Design; **Cultural Heritage**: Andrew Long & Associates; Wind Farm Design: WFD in-house; Noise: Bassett; Planning: Middleton's Lawyers.

2. Project – brief outline

Project title: The Sisters Wind Farm

Project location: (describe location with AMG coordinates and attach A4/A3 map(s) showing project site or investigation area, as well as its regional and local context)

The proposed Sisters Wind Farm site is located at The Sisters, approximately 14km north west of Terang in Moyne Shire, south west Victoria. Please find attached:

- Appendix A – a locality map;
- Appendix B – an aerial photograph showing activity areas;
- Appendix C – a copy of the Project Fact Sheet used for consultation with potentially effected and interested parties;
- Appendix D – a brochure for the MM92 turbine;
- Appendix E – PB report on flora & fauna;
- Appendix G – CHMP Desktop Study; and
- Appendix F – Preliminary Visual Assessment Report.

The latitude and longitude of the site or project area is as follows;

	Latitude			Longitude		
location point	degrees	Minutes	seconds	degrees	minutes	seconds
N	38	10	20.00	142	47	57.45
NE	38	11	3.33	142	49	4.33
S	38	12	31.05	142	47	40.65
SW	38	11	55.41	142	46	23.82

Short project description (few sentences)**:**
The proposed development consists of a wind farm expected to consist of up to 12-13 wind turbine generators, together with an onsite underground electrical cable network, access tracks, crane hard-standing areas, a wind monitoring mast, small electrical substation, switching gear and appropriate site signs.

The wind turbines likely to be proposed for the development will have an electricity output between 2 and 3.3 MW each. The wind farm would have an installed capacity of up to 29.99 MW. The turbines will be three-bladed upwind machines, with the rotor and nacelle mounted atop conical steel towers and could be pitch and/or stall regulated, fixed or variable speed.

An example of the type of turbine expected to be used is attached as Appendix D. Given lead times and availability issues for wind turbine generators in the current market no definitive turbine has been selected for the project so the RePower MM92 turbine detailed in Appendix D is for illustrative purposes only at this stage. The RePower MM82 is being installed currently for the Portland project a little further to the south of this site.

3. Project description

Aim/objectives of the project (what is its purpose / intended to achieve?):
The purpose of the development is to generate clean, renewable energy to provide electricity for Victoria without greenhouse gas emissions. The Project will contribute to achievement of the State and Federal targets for new renewable energy by 2020.

Background/rationale of project (describe the context / basis for the proposal, eg. for siting):
The Sisters site has been selected for a wind energy facility as the hills provide a good wind resource with potentially one of the higher inland wind speeds available in the State, The area is not coastal, sparsely populated and with little or no significant ecological values given the cleared agricultural nature of the existing land use. The project is sized to be accommodated within the existing 66kV distribution line adjacent to the site.

Main components of the project (nature, siting & approx. dimensions; attach A4/A3 plan(s) of site layout if available):
Up to 12 to 13 wind turbine generators. Depending on which wind turbine model is selected, each wind turbine could be between 125 and 135 metres from the ground to the tip of the blades, with typical tower heights of between 80 and 90 metres and blades of between 40-55 metres in length. Total area occupied by turbines, access tracks, hard-stand areas and switch gear building will be approximately 1-3% of the project area. Appendix D provides an illustration of the upwind 3 bladed wind turbine design expected to be used on the site.

Ancillary components of the project (eg. upgraded access roads, new high-pressure gas pipeline; off-site resource processing):
Access tracks will be constructed within the site to provide heavy vehicle access to the wind turbine locations during the construction phase. The width of the access tracks will typically be up to 10 metres. All access tracks within the wind farm site boundary will be designed and engineered to a suitable standard to accommodate heavy and wide loads. Existing tracks will be utilised wherever possible, and no native vegetation will be removed for the tracks or for any other ancillary aspects of the development.

Underground cabling will be installed between the wind turbines to link them to the on-site electrical substation. This cabling will be either 22kV or 33kV and will be buried approximately 1.5m below the ground.

A **Concrete Batching Plant** is likely to be constructed on site in order to supply concrete for the turbine foundations. The advantages of this are less vehicle movements as it removes the need for concrete delivery from another concrete batching plant which can be typically some distance from the site. The concrete batching plant would be expected to occupy a relatively small area and would be dismantled after construction of the wind turbine foundations is completed. If the batching

plant produces more than 100 tonnes of concrete per week, a works permit will be sought under the *Environmental Protection Act 1970* prior to any construction concrete work commencing.

A **Substation** will also be installed on site to connect the project to the existing 66kV distribution line located adjacent to Sisters-Noorat Road.

A permanent **Wind Monitoring Mast of up to 80m** will also be installed at the site; this is expected to be either a slim lattice or tubular steel tower similar to the designs currently used by the wind industry in Australia and allowed as a permitted activity in Victoria.

An indicative layout plan showing the expected locations of these components is shown in Appendix B. A micro-siting allowance of up to 100m will be applied for as part of the planning application and there may be some refinements and or changes to the layout to reflect cultural heritage and noise studies which are currently still under way. It is expected that any matters arising can be dealt with by the Responsible Authority for planning purposes, Moyne Shire Council given its experience with wind farms and the Wind Farm Guidelines currently in place for the assessment of wind farms in Victoria.

Key construction activities:

Preparatory works prior to construction

Prior to the main construction contract commencing, a number of enabling works would be undertaken, including:

(a) Geological site investigation, including a series of trial pits and/or geotechnical boreholes;
(b) Widening the entrance/access points to the wind farm development site;
(c) Widening the existing gateways, or inserting new gateways, in between paddocks;
(d) Stripping and careful storage of existing topsoil from the areas which would be affected by construction activities, including the tower-base area, substation, access track areas and crane hard standing areas;
(e) The construction of a temporary secure storage compound, with portables and toilet facilities for construction workers;
(f) Erection of signage on roads;
(g) Enabling works for the locating of a mobile concrete batching plant (if required); and
(h) Enabling works for the locating of a rock crushing plant (if required).

Construction Works

Construction of Access Tracks and Hard-standing areas: Surfaces will be graded and prepared with a compactable interlocking stone base and top dressing. It is proposed that the soil and rock that is removed be stored on-site at convenient locations for re-use within the wind farm site.

Excavations of Turbine Foundations: The construction of a raft or rock anchor style foundation for each turbine would involve the excavation of up to approximately 400 - 600 cubic metres of ground material (of which 200 - 300 cubic metres would be used as back fill around the turbine bases) to a depth of approximately 2 metres.

Pouring of Turbine Foundations: Shuttering and steel reinforcement is erected, followed by the pouring of concrete.

In parallel to the construction of turbine foundations, the electrical infrastructure is installed as follows:

Electrical and Communication Cable Trenching: Trenches to a depth of approximately 1.5 metres are dug for the laying of underground cabling between the turbines and the substation, and then backfilled along with pasture reinstatement as required.

Electrical Distribution Line: An existing 66kV line runs adjacent to the proposed project site which has adequate capacity to connect the electricity generated from the proposed wind farm.

Substation and Switchyard: A switchyard and substation with a small building (possibly containing meter and the operations and communication equipment for the wind farm) would be constructed on the site.

Delivery, Assembly and Erection of Wind Turbines: The turbines would be delivered to the site via truck at a rate of about 5 or 6 semi-trailers per turbine. Initially a small crane is used to lift on the tower base section and subsequently a much larger, up to 650 tonne, mobile or crawler crane is used to lift and position the higher tower sections, rotor and nacelle. Erection would typically to take up to 3 days per turbine including rigging and de-rigging the crane depending on the weather.

Re-instatement Works: Disturbance to any ground, other than for the construction of permanent wind farm assets, will be remediated following construction with pasture and fence reinstatement as required.

Key operational activities:

Commissioning of the wind farm will follow construction, with regular maintenance of the turbines being an on-going activity throughout the project's lifetime. It is expected that approximately two to four full time jobs will be created for long term maintenance of the turbines on site at The Sisters. Maintenance staff are generally on call and live within 20-30 minutes travelling time of the site.

Key decommissioning activities (if applicable):

Decommissioning the wind farm at the end of its lifetime would entail the removal of all the turbine components, the transformers, the substation and associated buildings.

One of the advantages of wind power generation over other forms of electricity production is the ease of decommissioning. A wind farm and associated infrastructure can be quickly and easily dismantled with the site rehabilitated and restored leaving the site essentially as it was before the wind farm was constructed.

Any decommissioning phase would require access by heavy vehicles to and from the site to remove all turbines and associated infrastructure. However this construction traffic would be for a short duration and would be generally less than for the construction phase.

Is the project an element or stage in a larger project?
☒ No ☐ Yes If yes, please describe: the overall project strategy for delivery of all stages and components; the concept design for the overall project; and the intended scheduling of the design and development of project stages).

Is the project related to any other past, current or mooted proposals in the region?
☒ No ☐ Yes If yes, please identify related proposals.

4. Project alternatives

Brief description of key alternatives considered to date (eg. locational, scale or design alternatives. If relevant, attach A4/A3 plans):

The proponent's parent company routinely investigates various potential green-field wind energy sites as part of its core business. The Sisters project has been sited and scaled as is appropriate for the land area and connection available for this location.

The Sisters was found to be the most appropriate location in this context as the proximity to

connection, low ecological effect and suitable wind speed all provide a unique combination of factors for a modest sized project. Further, the new land use will provide landowners with some diversification of income.

Brief description of key alternatives to be further investigated (if known)**:**
Not applicable

5. Proposed exclusions

Statement of reasons for the proposed exclusion of any ancillary activities or further project stages from the scope of the project for assessment:
Not applicable

6. Project implementation

Implementing organisation (ultimately responsible for project, ie. not contractor)**:**
The Sisters Wind Farm Pty Ltd

Implementation timeframe: Project construction is expected to take place over a period of up to 9-12 months.

Proposed staging (if applicable): Not applicable.

7. Description of proposed site or area of investigation

Has a preferred site for the project been selected?

☐ No ☒ Yes If no, please describe area for investigation.
If yes, please describe the preferred site in the next items (if practicable).

General description of preferred site, (including aspects such as topography/landform, soil types/degradation, drainage/ waterways, native/exotic vegetation cover, physical features, built structures, road frontages; attach ground-level photographs of site, as well as A4/A3 aerial/satellite image(s) and/or map(s) of site & surrounds, showing project footprint):

The landscape of the Sisters site is dominated by hills formed by scoria cones. The site has been extensively cleared for agriculture and accordingly, there is virtually no native vegetation remaining on the site. Vegetation on the site is dominated by pasture grasses and exotic windbreaks.

There are no permanent water courses on the site and only limited potential for ephemeral pools after heavy rain.

The site is generally lacking any outstanding features, including caves, aside from “The Sisters” hills themselves which make up the site area. There are no planning, landscape overlays or other special planning features associated with the site. The site will require a cultural heritage survey and CHMP as wind farms are a high impact activity under the new Aboriginal Heritage Regulations 2007 and the site is located in the volcanic cones of western Victoria.

The site is dominated by a series of moderate, localised peaks of up to 180m asl, with the lower areas of land approximately 140-150m asl.
The only existing buildings on site are residential and farming related (i.e. houses, sheds).

Site area (if known): 790 (hectares) **Route length** (for linear infrastructure) ……. (km) **and width** …….. (m)
Current land use and development: Stock farming and some cropping.
Description of local setting (eg. adjoining land uses, road access, infrastructure, proximity to residences & urban centres): The Sisters locality is in the rural farming district of south west Victoria, approximately 14km NW of Terang and 10km south of Mortlake. Road access to the site is very good, with Sisters-Noorat Road and Dairy Lane bisecting the site. The Princes Highway passes approximately 10km from the site, allowing for the delivery of turbine components. There is an existing 66kV distribution line located adjacent to the site on Sisters-Noorat Road which will be used to connect the project to the distribution network in south west Victoria.
Planning context (eg. strategic planning, zoning & overlays, management plans): Farming Zone, no overlays
Local government area(s): Moyne Shire Council

8. Existing environment

Overview of key environmental assets/sensitivities in project area and vicinity (cf. general description of project site/study area under section 7)**:** The site is currently utilised for stock grazing and cropping, and has been almost entirely cleared of native vegetation. No native vegetation will be removed as part of this proposal. There are no records of any EPBC or FFG listed flora and fauna occurring on, or within 5km of, the site. This lack of records could be expected due to a paucity of potential habitat for native species on the site. Bird species which have been recorded on the site were common farmland species such the Magpie, Skylark and Brown Falcon. As such the risk to native species from the construction and operation of the proposed Sisters Wind Farm has been assessed as very low, as detailed in The Sisters Wind Farm Biodiversity Assessment in Appendix E. There are no records of sites of cultural heritage significance on or near the proposed site, as is detailed in the Aboriginal Heritage Desktop Study and Implications for Development in Appendix G. Further investigations of potential cultural heritage values will be undertaken as part of the Cultural Heritage Management Plan which is being prepared in accordance with the Aboriginal Heritage Act 2006 and Aboriginal Heritage Regulations 2007. This information will form part of the later Planning Permit application for the proposed wind farm. The site area consists of a number of small hills created by past volcanic activity, as discussed in the Preliminary Landscape Visual Character Assessment in Appendix F. The assessment of the geomorphologic value of the site was summarised thus: “The landscape is highly modified with no areas of amenity value in terms of natural or geological form”.

9. Land availability and control

Is the proposal on, or partly on, Crown land? ☒ No ☐ Yes If yes, please provide details.
Current land tenure (provide plan, if practicable): Private Freehold Land
Intended land tenure (tenure over or access to project land): Freehold with commercial lease

Other interests in affected land (eg. easements, native title claims):

10. Required approvals

State and Commonwealth approvals required for project components (if known):
A Planning Permit will be required under the Planning and Environment Act 1987. As the project is under 30MW, Moyne Shire will be the responsible authority for the issue of any planning permit.

Have any applications for approval been lodged?

☐ No ☒ Yes If yes, please provide details.

An EPBC referral was made for The Sisters Wind Farm on the 12th of June 2008 to the Department of Environment, Water, Heritage and Arts. A decision that the activity is not a controlled action for purposes of the EPBC Act was made on 24 July 2008 and a copy of that decision is attached as Appendix F.

A Notice of Intent to lodge a CHMP was forwarded to AAV on 12th of June 2008. It was acknowledged by AAV in its letter dated 19 June 2008 and allocated AAV Project Number 10435. The Notice of Intent was copied and served on all landowners in the project and likely interested Aboriginal parties. Currently there is no Registered Aboriginal Party for this area and accordingly AAV is the recognised consultation party until a registered party has been appointed. As part of the CHMP process a Desktop study has been completed by a recognised Heritage Consultant (Andrew Long & Associates) which is attached as Appendix G and a further Standard Assessment involving on site surveys is currently underway.

Approval agency consultation (agencies with whom the proposal has been discussed):
As wind farm will be below 30MW, Moyne Shire Council is the Responsible Authority for Planning purposes and has been copied on the EPBC, Notice of Intent of CHMP and other consultative material including the open day.

Other agencies consulted: A copy of the EBPC referral and annexed reports was submitted to DSE's regional office in Warrnambool for comment. AAV is the Registered Aboriginal Party under Aboriginal Regulations 2007 as no other party has been accepted for registration presently. Consultation has also commenced and is ongoing with CASA and various telecommunications companies holding licences in the vicinity of the wind farm site.

PART 2 POTENTIAL ENVIRONMENTAL EFFECTS

11. Potentially significant environmental effects

Overview of potentially significant environmental effects (identify key potential effects and comment on their significance and likelihood, as well as key uncertainties):

Potential effects have been investigated with a number of reports attached to this referral, specifically:

Biodiversity Assessment
This assessment, conducted by Parsons Brinckerhoff, investigated database records for species in the region and included an on site survey. No species listed under the Flora & Fauna Guarantee Act or the EPBC Act were found on, or were likely to be present on, the site. The impacts from the development on native flora and fauna were assessed as very low. This was to be expected as there is almost no native vegetation remaining on the site and it is not in close proximity to any significant water bodies or bushland areas which could provide suitable habitat. For more information please see Appendix E.

Visual Impact Assessment
A preliminary visual impact assessment has been conducted by Wax Design and is attached as Appendix F. The report assesses the existing landscape character around the site (subregional area). Representative viewpoints have been agreed with Council of what the wind farm may look like. It should be noted however that as the noise and cultural heritage surveys are not yet complete and there may still be some refinement and or change to the proposed layout. But using the turbine locations identified in Appendix B the preliminary conclusion subject to finalisation of the outstanding surveys is;

> The existing landscape character around The Sisters (subregional area) is influenced by linear evergreen shelterbelt planting to cadastral boundaries. The vegetation is typically 20-30 m in height, which forms a dynamic visual landscape layering of intermittent depth of views. This association of contained and open views provides varied viewing aspects of the proposed development site.
>
> The underlying topography of the site also provides visual containment. The geological features of Mount Noorat to the east of the subject site dominate the subregional context. This volcanic feature appearing more elevated in scale and form than the surrounding areas.
>
> The Sisters upon which the turbines have been proposed to be located, is a complex layered volcanic feature described as a punctuated circular landform. The elevation of The Sisters is not as prominent as Mount Noorat, and due to the interrelationship of natural weathering processes and agricultural landscape modification. The Sisters is not defined as a visual feature within the sub regional area.
>
> Due to the interrelationship of the underlying topography and vegetation patterning, the field of view and visual envelope continually changes altering the potential visual effect of the development.
>
> To the north of the site, the visual effect will vary but will be limited due to the pattern of vegetation within field boundaries. It is anticipated that their will be a slight visual effect within intermittent localised areas which are not influenced by the cadastral plantings.
>
> To the south within the local to subregional area, the visual effect associated to the vegetation and underlying topography once again restricts the visual effect. However, to the south east located near Viewpoints 3 and 6, the visual effect is slightly more prominent, due to more open landscape character. However, shelterbelt planting to the Mortlake Framlingham Road and Campion Lane will provide intermittent screens reducing the visual effect locally.
>
> In summary, it is anticipated that the proposed Sisters Wind Farm will have a slight to moderate visual effect from isolated observation points within the subregional area.

Cultural Heritage Assessment
A Desktop Study pursuant to the Aboriginal Heritage Regulations 2007 has been prepared and is attached as Appendix G. Following the recommendations in this report, a Standard Assessment including on site survey work is currently planned to assess the potential impacts of the wind farm on any areas of cultural heritage sensitivity. This work will result in the preparation of a CHMP for the project and site which will be subject to consultation with interested stakeholders and approval by AAV as the default Registered Aboriginal Party.

12. Native vegetation, flora and fauna

Native vegetation

Is any native vegetation likely to be cleared or otherwise affected by the project?

☒ NYD ☒ No ☒ Yes If yes, answer the following questions and attach details.

What investigation of native vegetation in the project area has been done? (briefly describe)

What is the maximum area of native vegetation that may need to be cleared?

☒ NYD Estimated area ……..(hectares)

How much of this clearing would be authorised under a Forest Management Plan or Fire Protection Plan?

☒ N/A …… approx. percent (if applicable)

Which Ecological Vegetation Classes may be affected? (if not authorised as above)

☒ NYD ☒ Preliminary/detailed assessment completed. If assessed, please list.

Have potential vegetation offsets been identified as yet?

☒ NYD ☒ Yes If yes, please briefly describe.

Other information/comments? (eg. accuracy of information)

NYD = not yet determined

Flora and fauna

What investigations of flora and fauna in the project area have been done?
(provide overview here and attach details of method and results of any surveys for the project & describe their accuracy)
An on site survey and database search was conducted. No listed species have been found on or adjacent to the site. The risk to native flora and fauna was assessed as very low. See Appendix E for more detail.

Have any threatened or migratory species or listed communities been recorded from the local area?

☒ NYD ☒ No ☒ Yes If yes, please:

- List species/communities recorded in recent surveys and/or past observations.
- Indicate which of these have been recorded from the project site or nearby.

If known, what threatening processes affecting these species or communities may be exacerbated by the project? (eg. loss or fragmentation of habitats) Please describe briefly.
None

Are any threatened or migratory species, other species of conservation significance or listed communities potentially affected by the project?

☒ NYD ☒ No ☒ Yes If yes, please:

- List these species/communities:
- Indicate which species or communities could be subject to a major or extensive impact (including the loss of a genetically important population of a species listed or nominated for listing) Comment on likelihood of effects and associated uncertainties, if practicable.

Is mitigation of potential effects on indigenous flora and fauna proposed?

☒ NYD ☒ No ☒ Yes If yes, please briefly describe.

Other information/comments? (eg. accuracy of information)

13. Water environments

Will the project require significant volumes of fresh water (eg. > 1 Gl/yr)? ☐ NYD ☒ No ☐ Yes If yes, indicate approximate volume and likely source.
Will the project discharge waste water or runoff to water environments? ☐ NYD ☒ No ☐ Yes If yes, specify types of discharges and which environments.
Are any waterways, wetlands, estuaries or marine environments likely to be affected? ☐ NYD ☒ No ☐ Yes If yes, specify which water environments, answer the following questions and attach any relevant details.
Are any of these water environments likely to support threatened or migratory species? ☐ NYD ☒ No ☐ Yes If yes, specify which water environments.
Are any potentially affected wetlands listed under the Ramsar Convention or in 'A Directory of Important Wetlands in Australia'? ☐ NYD ☒ No ☐ Yes If yes, please specify.
Could the project affect streamflows? ☐ NYD ☒ No ☐ Yes If yes, briefly describe implications for streamflows.
Could regional groundwater resources be affected by the project? ☐ NYD ☒ No ☐ Yes If yes, describe in what way.
Could environmental values (beneficial uses) of water environments be affected? ☐ NYD ☒ No ☐ Yes If yes, identify waterways/water bodies and beneficial uses (as recognised by State Environment Protection Policies)
Could aquatic, estuarine or marine ecosystems be affected by the project? ☐ NYD ☒ No ☐ Yes If yes, describe in what way.
Is there a potential for extensive or major effects on the health or biodiversity of aquatic, estuarine or marine ecosystems over the long-term? ☒ No ☐ Yes If yes, please describe. Comment on likelihood of effects and associated uncertainties, if practicable.
Is mitigation of potential effects on water environments proposed? ☐ NYD ☒ No ☐ Yes If yes, please briefly describe.
Other information/comments? (eg. accuracy of information)

14. Landscape and soils

Landscape

Has a preliminary landscape assessment been prepared? ☐ No ☒ Yes If yes, please attach. See Appendix F.
Is the project to be located either within or near an area that is: • **Subject to a Landscape Significance Overlay or Environmental Significance Overlay?** ☐ NYD ☒ No ☐ Yes If yes, provide plan showing footprint relative to overlay. • **Identified as of regional or State significance in a reputable study of landscape values?** ☐ NYD ☒ No ☐ Yes If yes, please specify. • **Within or adjoining land reserved under the *National Parks Act 1975* ?** ☐ NYD ☒ No ☐ Yes If yes, please specify. • **Within or adjoining other public land used for conservation or recreational purposes ?** ☐ NYD ☒ No ☐ Yes If yes, please specify.
Is any clearing vegetation or alteration of landforms likely to affect landscape values? ☐ NYD ☒ No ☐ Yes If yes, please briefly describe.
Is there a potential for effects on landscape values of regional or State importance? ☐ NYD ☒ No ☐ Yes Please briefly explain response. The Sisters, while an elevated landform, is not a prominent feature in the regional landscape. The site is highly modified and the proposed development would not have an effect on any important regional or state landscape.
Is mitigation of potential landscape effects proposed? ☐ NYD ☐ No ☒ Yes If yes, please briefly describe. See Appendix F and Question 11 above where the assessment concludes that the "proposed Sisters wind farm will have a slight to moderate visual effect from isolated observation points within the subregional area".
Other information/comments? (eg. accuracy of information)

Note: A preliminary landscape assessment is a specific requirement for a referral of a wind energy facility. This should provide a description of:

- The landscape character of the site and surrounding areas including landform, vegetation types and coverage, water features, any other notable features and current land use;
- The location of nearby dwellings, townships, recreation areas, major roads, above-ground utilities, tourist routes and walking tracks;
- Views to the site and to the proposed location of wind turbines from key vantage points (including views showing existing nearby dwellings and views from major roads, walking tracks and tourist routes) sufficient to give a sense of the overall site in its setting.

Soils

Is there a potential for effects on land stability, acid sulphate soils or highly erodible soils? ☐ NYD ☒ No ☐ Yes If yes, please briefly describe.
Are there geotechnical hazards that may either affect the project or be affected by it? ☒ NYD ☐ No ☐ Yes If yes, please briefly describe.
Other information/comments? (eg. accuracy of information)

15. Social environments

Is the project likely to generate significant volumes of road traffic, during construction or operation?

☐ NYD ☒ No ☐ Yes If yes, provide estimate of traffic volume(s) if practicable.

The small scale of the proposed project at 12-13 turbines with 5-6 over dimension load truck movements per turbine will result in traffic volumes of the order of 78 movements. This is a low number of movements compared with other proposed wind farm projects in the State and with a suitable Traffic Management Plan can be further minimised in terms of potential adverse effects.

Is there a potential for significant effects on the amenity of residents, due to emissions of dust or odours or changes in visual, noise or traffic conditions?

☐ NYD ☒ No ☐ Yes If yes, briefly describe the nature of the changes in amenity conditions and the possible areas affected.

It should be recorded that some residents not involved with the project but living in close proximity to the site may contest the view that the visual effects of the wind farm in particular are significant and can not be adequately avoided, mitigated or remedied. This can be addressed through the usual planning processes.

Is there a potential for exposure of a human community to health or safety hazards, due to emissions to air or water or noise or chemical hazards or associated transport?

☐ NYD ☒ No ☐ Yes If yes, briefly describe the hazards and possible implications.

Is there a potential for displacement of residences or severance of residential access to community resources due to the proposed development?

☐ NYD ☒ No ☐ Yes If yes, briefly describe potential effects.

Are non-residential land use activities likely to be displaced as a result of the project?

☐ NYD ☒ No ☐ Yes If yes, briefly describe the likely effects.

Do any expected changes in non-residential land use activities have a potential to cause adverse effects on local residents/communities, social groups or industries?

☐ NYD ☒ No ☐ Yes If yes, briefly describe the potential effects.

Is mitigation of potential social effects proposed?

☐ NYD ☐ No ☐ Yes If yes, please briefly describe.

Other information/comments? (eg. accuracy of information)

Cultural heritage

Have relevant Indigenous organisations been consulted on the occurrence of Aboriginal cultural heritage within the project area?

☐ No If no, list any organisations that it is proposed to consult.

☒ Yes If yes, list the organisations so far consulted.

Framlingham Aboriginal Trust

AAV as the default Registered Aboriginal Party.

What investigations of cultural heritage in the project area have been done?

(attach details of method and results of any surveys for the project & describe their accuracy)

Please see Appendix G attached.

Is any Aboriginal cultural heritage known from the project area?

☐ NYD ☒ No ☐ Yes If yes, briefly describe:

- Any sites listed on the AAV Site Register
- Sites or areas of sensitivity recorded in recent surveys from the project site or nearby
- Sites or areas of sensitivity identified by representatives of Indigenous organisations

Please see Appendix G attached.

Are there any cultural heritage places listed on the Heritage Register or the Archaeological

Inventory under the *Heritage Act 1995* within the project area?

☐ NYD ☒ No ☐ Yes If yes, please list.

Is mitigation of potential cultural heritage effects proposed?

☒ NYD ☐ No ☐ Yes If yes, please briefly describe.

The outcome of further investigations into Cultural Heritage at the site may influence the project layout.

Other information/comments? (eg. accuracy of information)

16. Energy, wastes & greenhouse gas emissions

What are the main sources of energy that the project facility would consume/generate?

☐ Electricity network. If possible, estimate power requirement/output ……

☐ Natural gas network. If possible, estimate gas requirement/output ……...

☒ Generated on-site. If possible, estimate power capacity/output Up to 29.9MW maximum installed capacity

☐ Other. Please describe.

Please add any relevant additional information.

What are the main forms of waste that would be generated by the project facility?

☐ Wastewater. Describe briefly.

☐ Solid chemical wastes. Describe briefly.

☒ Excavated material. Describe briefly. Soil and/or rock material from foundation excavation.

☐ Other. Describe briefly.

Please provide relevant further information, including proposed management of wastes.

What level of greenhouse gas emissions is expected to result directly from operation of the project facility?

☒ Less than 50,000 tonnes of CO_2 equivalent per annum

☐ Between 50,000 and 100,000 tonnes of CO_2 equivalent per annum

☐ Between 100,000 and 200,000 tonnes of CO_2 equivalent per annum

☐ More than 200,000 tonnes of CO_2 equivalent per annum

Please add any relevant additional information, including any identified mitigation options.

17. Other environmental issues

Are there any other environmental issues arising from the proposed project?

☐ No ☒ Yes If yes, briefly describe.

Other effects such as shadow flicker, electromagnetic interference and a detailed visual assessment from non project but neighbouring residences will be undertaken as part of the planning application. A complete assessment of all potential effects in accord with the criteria in the Wind Farm Guidelines will be documented.

18. Environmental management

What measures are currently proposed to avoid, minimise or manage the main potential adverse environmental effects? (if not already described above)

☒ Siting: Please describe briefly The wind farm layout will be refined and or changed to reflect the further input of independent expert studies on noise and cultural heritage amongst others.

☒ Design: Please describe briefly The turbines will be finished in a suitable off-white/grey colour with a non reflective finish to avoid glint and or minimise shadow flicker and visual impact. Vegetative screening can also be used to avoid potential adverse visual effects.

☒ Environmental management: Please describe briefly. A detailed Environmental Management Plan incorporating the provisions required for similar scale projects such as the Drysdale Wind Farm will be required.

☒ Other: Please describe briefly The Wind Farm Guidelines and Moyne Shire Council's experience with wind farms means that any permit consent conditions will be relevant in mitigating, avoiding or remedying any material adverse effects.

Add any relevant additional information.

19. Other activities

Are there any other activities in the vicinity of the proposed project that have a potential for cumulative effects?

☒ NYD ☒ No ☒ Yes If yes, briefly describe.

Acciona has proposed a large wind farm in two sections being Mortlake South and Mortlake East of up to 40-50 turbines each. The southern most turbine of Mortlake South could be located within a few kms or less of The Sisters nearest turbine. The exact details are unknown as Acciona has not yet filed a planning application for the proposed developments although the projects have applied and received approval that they do not require an EES.
Origin Energy has approval for construction and operation of a Gas Combined Cycles plant near Mortlake and Santos has recently announced publicly that it intends to seek approval for a similar plant in the vicinity.

20. Investigation program

Study program

Have any environmental studies not referred to above been conducted for the project?

☒ No ☒ Yes If yes, please list here and attach if relevant.

Has a program for future environmental studies been developed?

☒ No ☒ Yes If yes, briefly describe. The program will follow the States Wind Farm Guidelines being the "Policy and planning guidelines for development of wind energy facilities in Victoria".

Consultation program

Has a consultation program conducted to date for the project?

☒ No ☒ Yes If yes, outline the consultation activities and the stakeholder groups or organisations consulted. An extensive consultation process is underway including all of the recommended parties in the Guidelines and has included a public information day at which all houses within 3 kms of the proposed development received a copy of the project specific Fact Sheet and an individual information to attend. A web site has been established.

Has a program for future consultation been developed?

☒ NYD ☒ No ☒ Yes If yes, briefly describe.

Future consultation will build on the above processes and will include individual dialogue with interested stakeholders as the layout is refined or changed following completion of the

outstanding expert studies notably, cultural heritage and noise.

Authorised person for proponent:

I, …Alistair Wilson……(full name),

……Director……(position), confirm that the information contained in this form is, to my knowledge, true and not misleading.

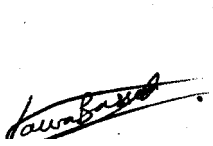
Signature

Date: 10 September 2008

Person who prepared this referral:

I, …Laura Bassed……(full name),

……Project Planner……(position), confirm that the information contained in this form is, to my knowledge, true and not misleading.



Signature

Date 10 September 2008