



31 January 2011

Referral Business Entry Point
Environment Assessment Branch
Sustainability, Environment, Water, Population and Communities
GPO Box 787
CANBERRA ACT 2601

Dear Sir/Madam,

RE: EPBC Referral for the proposed expanded Willogoleche Wind Farm

International Power (Australia) Pty Ltd is proposing to develop the proposed Willogoleche Wind Farm, in the Mid North region of South Australia. A Development Application for this wind farm was submitted to the Regional Council of Goyder for assessment in December 2010.

In relation to this development, please find enclosed a hard copy of the EPBC. I have also enclosed a copy of a CD containing Annexure D (Environmental Statement) of the Referral.

A digital copy of the EPBC Referral will be sent via an accompanying email. It will include both a PDF and word document copy as requested on the referral form.

Wind Prospect Pty Ltd are acting as planning advisors for this project. If you should require further information about this project or the referral document during any stage of its assessment, please contact Stuart Whiting at Wind Prospect on (08) 8384 7755 or at stuart.whiting@windprospect.com.au.

We look forward to hearing from you regarding the referral outcome.

Yours sincerely

Stuart Whiting
Development Manager, Wind Prospect
Mobile: 0488 110 675

WIND PROSPECT PTY LTD

PO Box 389 Beach House, Level 1, 20 Beach Road • Christies Beach • South Australia • 5165 •

Tel: +61 (8) 8384 7755 • Fax: +61 (8) 8384 7722

A.B.N. 22 091 885 924 • Email: info@windprospect.com.au • Internet: www.windprospect.com.au



Australian Government

Department of Sustainability, Environment, Water, Population and Communities

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 that 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)
- 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 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 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 Referral Business Entry Point (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.

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

Instructions

Instructions are provided in green 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 two megabytes (2mb) 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 Referral Business Entry Point for advice. Attachments larger than two megabytes (2mb) 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 submit a referral?

Referrals may be submitted by mail, fax or email.

Mail to:

Referral Business Entry Point
Environment Assessment Branch
Department of Sustainability, Environment, Water, Population and Communities
GPO Box 787
CANBERRA ACT 2601

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

Fax to: 02 6274 1789

- Faxed documents must be of sufficiently clear quality to be scanned into electronic format.
- Address the fax to the mailing address, and clearly mark it as a 'Referral under the EPBC Act'.
- Follow up with a mailed hardcopy including copies of any attachments or supporting reports.

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 Sustainability, Environment, Water, Populations and Communities Community Information Unit on 1800 803 772 or
- visit the web site www.environment.gov.au/epbc

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: EXPANDED WILLOGOLECHE WIND FARM

1 Summary of proposed action

NOTE: You must also attach a map/plan(s) showing the location and approximate boundaries of the area in which the project is to occur. Maps in A4 size are preferred. You must also attach a map(s)/plan(s) showing the location and boundaries of the project area in respect to any features identified in 3.1 & 3.2, as well as the extent of any freehold, leasehold or other tenure identified in 3.3(i).

1.1 Short description

International Power (Australia) Pty Ltd is proposing to construct and operate a wind farm consisting of up to 37 wind turbines located on the Willogoleche Hill in South Australia, 3.5km to the west of the town of Hallett, SA 5419. Figure 1 shows the location of the proposed action. The development will consist of up to 37 wind turbines, onsite underground electrical cable network, access tracks, crane hardstands and site operations facilities. A 2.4km underground connection is proposed to a new substation to be developed by ElectraNet Pty Ltd. As ElectraNet are the contracting entity for this portion of the works, the substation and underground interconnection to the wind farm are not part of this referral. Ecology surveys conducted over this portion of the works indicate that there are would be no significant impact on the matters protected by Part 3 of the EPBC Act.

A consent exists for the construction and operation of 26 wind turbines and associated infrastructure in the same location (Regional Council of Goyder Development Number: 422/0078/04). In this referral the 37 turbine wind farm is referred to as the expanded Willogoleche Wind Farm. Should the expanded Willogoleche Wind Farm (37 turbines) be consented and built, the consent for the 26 turbine wind farm will not be pursued.

Development of the 26 turbine wind farm on the site was previously determined a non-controlled action under the EPBC Act on the 9/9/2004 (EPBC 2004/1715). However recent surveys of the area have shown that due to improved farming practises and growing conditions over the last 6 years, some areas of the native grassland now qualify as the Threatened Ecological Community ("TEC") *Iron-Grass Natural Temperate Grassland of South Australia*. Coupled with the expansion of the project, International Power believes the submission of another referral under the EPBC Act is required.

Use 2 or 3 sentences to uniquely identify the proposed action and its location.

1.2 Latitude and longitude

Latitude and longitude details are used to accurately map the boundary of the proposed action. If these coordinates are inaccurate or insufficient it may delay the processing of your referral.

Figure 2 shows the location of the boundary of the proposed action

Point	Longitude	Latitude (S)
1	138°50'46"	33°22'43"
2	138°51'18"	33°23'03"
3	138°51'33"	33°23'05"
4	138°51'53"	33°23'21"
5	138°52'27"	33°23'59"
6	138°51'57"	33°25'10"
7	138°52'02"	33°25'51"
8	138°50'14"	33°25'57"
9	138°50'07"	33°26'28"
10	138°50'33"	33°26'33"
11	138°50'20"	33°27'10"
12	138°49'04"	33°26'54"
13	138°49'18"	33°26'07"
14	138°50'07"	33°24'56"
15	138°49'34"	33°24'38"
16	138°49'14"	33°24'14"
17	138°49'20"	33°24'14"
18	138°49'37"	33°23'57"
19	138°49'32"	33°23'46"
20	138°49'51"	33°23'19"
21	138°50'14"	33°23'30"

The Interactive Mapping Tool may provide assistance in determining the coordinates for your project area.

If area less than 5 hectares, provide the location as a single pair of latitude and longitude references. If area greater than 5 hectares, provide bounding location points.

If the proposed action is linear (eg. a road or pipeline), provide coordinates for each turning point.

Do not use AMG coordinates.

1.3 Locality and property description

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

The nearest wind turbine of the proposed expanded wind farm is approximately 3.5km from the town of Hallett. Figure 1 shows the overview of the location of the project.

The site comprises undulating, low, moderate and high areas of relief, with moderate to high ranges. The ridges and spurs of the Willogoleche Hill Range (maximum elevation 680 metres AHD) are the main physical features. The ranges are aligned predominantly in a north-south orientation, while the spurs generally run from the ridgeline down to the west. The broad valleys to the west and east of the range sit at approximately 500 m AHD and are characterised by broad shallow flat-bottomed valleys between prominent north-south ranges/ridgelines.

The land within the immediate and more general localities comprises large rural properties that are primarily utilised for farming purposes, more specifically grazing (sheep and some cattle) and cereal cropping (primarily on the lower slopes and flats between the ranges). These agricultural land uses are long established, and past land management practices have generally resulted in the majority of these properties being cleared of any significant native vegetation.

Some scattered pockets of trees and shrubs are evident (mainly around farm residences and fence lines) and small clusters of eucalypts (10-15 m high) are located in sections of the lower slopes and along road reserves.

1.4 Size of the development footprint or work area (hectares)

The total proposed area of the site is 29 hectares. This represents approximately 1.3% of the overall project area defined in 1.6 below.

1.5 Street address of the site

The proposal is located over 7 certificates of title (see 1.6 below). The nearest postal town is Hallett, SA 5419.

1.6 Lot description

Describe the lot numbers and title description, if known.

Title number		Hundred(s)	Size (ha) (approx.)
Volume	Folio		
5192	721	Anne	195.2
5212	588	Anne	292.9
5212	587	Anne	236.4
5192	720	Anne	237.2
5696	283	Anne	264.1
5664	454	Hallett	708
5192	718	Hallett	344.8
Total			2278.6

1.7 Local Government Area and Council contact (if known)
 If the project is subject to local government planning approval, provide the name of the relevant council contact officer.

Regional Council of Goyder

Name John Brak
 Position Chief Executive Officer
 Address 1 Market Square
 Burra SA 5417
 Contact Details Tel: 08 8892 0100
 Fax: 08 8892 2467
 Email: jbrak@goyder.sa.gov.au

1.8 Time frame
 Specify the time frame in which the action will be taken including the estimated start date of construction/operation.
 A planning application for Development Approval for the Expanded Willogoleche Wind Farm was submitted to the Regional Council of Goyder on the 21st December 2010. The applicant proponent has requested a 5 year validity of the Development Approval and a 2 year construction period thereafter. It is intended that construction will be commenced within the requested 5 year Development Approval period, and be complete by 2018, but commercialisation of the site is subject to the economics of the renewable energy sector. Operation of the project would commence upon completion of construction in 2018 and continue for 25 years before decommissioning.

1.9 Alternatives to proposed action Were any feasible alternatives to taking the proposed action (including not taking the action) considered but are not proposed?	X	No
		Yes, you must also complete section 2.2
1.10 Alternative time frames etc Does the proposed action include alternative time frames, locations or activities?	X	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 Is the action subject to a state or territory environmental impact assessment?	X	No
		Yes, you must also complete Section 2.5
1.12 Component of larger action Is the proposed action a component of a larger action?	X	No
		Yes, you must also complete Section 2.7
1.13 Related actions/proposals Is the proposed action related to other actions or proposals in the region (if known)?		No
	X	Yes, provide details: A 2.4km underground connection is proposed to a new substation to be developed by ElectraNet Pty Ltd. The substation and interconnection Development Number 422/V015/09 has been consented by the SA Minister for Urban Development and Planning in accordance with the Development Act 1993.

1.14	Australian Government funding Has the person proposing to take the action received any Australian Government grant funding to undertake this project?	X 	No Yes, provide details:
1.15	Great Barrier Reef Marine Park Is the proposed action inside the Great Barrier Reef Marine Park?	X 	No Yes, you must also complete Section 3.1 (h), 3.2 (e)

2 Detailed description of proposed action

NOTE: It is important that the description is complete and includes all components and activities associated with the action. If certain related components are not intended to be included within the scope of the referral, this should be clearly explained in section 2.7.

2.1 Description of proposed action

This should be a detailed description outlining all activities and aspects of the proposed action and should reference figures and/or attachments, as appropriate.

The proposed Expanded Willogoleche Wind Farm is located in South Australia, approximately 160 km north of Adelaide and 3.5 km west of Hallett. The project area is located in the Mid-North region of South Australia, within the Regional Council of Goyder. The land is situated along the ridges of Willogoleche Hill. The site is located approximately 5km east of the existing Hallett Wind Farm. Figure 1 shows details of an indicative layout of the proposed action including access tracks, reticulation and turbine locations. Further iterations of the turbine layout may be possible subject to their being within the allowance of 100m requested in the development application.

The proposed wind farm will consist of the following components:

- Up to thirty-seven (37) wind turbine generators (WTGs)
- Access tracks incorporating underground electrical cable network
- On-site grid connection infrastructure
- Crane hardstand areas
- Up to two (2) permanent wind monitoring masts
- Operations and maintenance facilities
- Underground interconnection power line

The Expanded Willogoleche Wind Farm involves the development of a wind farm capable of generating an output of up to around 111 MW (based on the use of 3.0 MW turbines) for supply to the energy market. The actual turbines used for the development could vary from anywhere between 2.0 MW to around 3.0 MW, depending on the turbine selection which will occur closer to construction.

The layout of turbines, access tracks and supporting infrastructure has been and will continue to be carefully designed to avoid areas of high quality native vegetation and culturally significant areas.

A base project Environmental Management Plan (EMP) has been developed to ensure that correct environmental procedures are followed during construction.

Pre-construction

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

- (a) Detailed site investigation, including geotechnical investigations involving a series of trial pits and/or boreholes
- (b) Upgrading the surfaces of local roads and access tracks where required
- (c) Widening the junctions or corners of local roads, entrance/access points where required
- (d) Widening the existing gateways, or inserting new gateways, as necessary along fence lines
- (e) Stripping and careful storage of existing soil from the areas which would be affected by construction activities, including the tower bases, switchgear/substation yards, access track areas, crane hardstand areas and temporary laydown/carpark areas
- (f) The construction of a secure works facility, with project owner and subcontractors field offices (portables), carpark, laydown yard and toilet facilities (temporary)
- (g) Erection of signage on roads
- (h) Enabling works for the locating of a mobile concrete batching plant (temporary, if required)
- (i) Enabling works for the locating of a rock crushing plant (temporary, if required)

- (j) Environmental survey and refinement (if necessary) of the Environmental Management Plan, Health and Safety Plan, Traffic Management Plan and any other documentation as required under the planning authorisation
- (k) Survey of critical boundaries and pegging of infrastructure locations
- (l) Detailed cultural heritage and flora/fauna surveys across entire site
- (m) Preparation of works procedures and Project Implementation Plan
- (n) Engineering design works and submission for Building Rules Consent

Construction

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

Excavation of Turbine Bases: Depending on the ground conditions at the site, different methods can be used to anchor the wind turbines. *Gravity foundations* would involve the excavation of approximately 450 m³ of ground material (of which 200 m³ would be used as back fill around the turbine bases) to a depth of approximately 2.5 m. If the geology is suitable for *rock anchor foundations (as is anticipated by preliminary geotechnical testing)*, the construction of the foundation for each machine would involve the excavation of approximately 100 m³ of ground material to a depth of approximately 2.5 m.

Pouring of Turbine Bases: A *gravity foundation* would involve the installation of shuttering and steel reinforcement, followed by the pouring of concrete to form the base in-situ. *Rock anchor foundations* require shuttering and steel reinforcement, drilling of cores into the bedrock to a depth of approximately 20 m, after which the rock anchors are grouted, stressed and secured once the concrete has cured sufficiently.

Electrical and Communication Cable Trenching: Either prior to or during turbine base construction, the site electrical system would be installed. This would involve the cutting or excavation of trenches to a depth of around 0.8m, for the laying of underground cabling that links the turbines. All trenches would be backfilled and marked with warning tape once the cables were laid. The majority of the underground cabling will be located adjacent to the access tracks.

Delivery, Assembly and Erection of Wind Turbines: The turbine components would be delivered to the site via semi-trailers. The method of construction would involve the use of a small mobile crane for the ground assembly operation. A larger 600-1000 tonne mobile crane (or alternatively a 300-400 tonne crawler crane) together with a smaller tailing crane, would be required to erect the turbines into their standing positions. Erection is likely to take approximately 2-3 days per turbine.

Erection of Grid Connection System: A location for the on-site substation has been selected at the Southern end of the wind farm site. The yard will be surfaced with compacted quarry rubble to form a hardstand area. Reinforced concrete footings will then be constructed to support electrical infrastructure and buildings. Infrastructure required within the yard includes a 33 kV switchgear, power conditioning equipment and operations office. The on-site substation will be connected to the new Willalo Substation by at least two 2.5km underground cables.

Construction of Willalo Substation: A new substation site has been selected adjacent McAskill Road, approximately 2.5km South West of the wind farm project area. The total compound area will be in the order of 160 m by 140 m. The yard will be surfaced with compacted quarry rubble to form a hardstand area. Reinforced concrete footings will then be constructed to support electrical infrastructure and buildings. Infrastructure required within the yard includes a 33 kV/275 kV transformer, switchgear, power conditioning equipment and operations office. A new lattice tower will be built at the point of connection into the existing 275kV transmission line.

Reinstatement Works: Ground disturbed by the construction, but not associated with the final land-take for the development would be reinstated following construction. This would include revegetation works if required. Monitoring of revegetation and appropriate remedial works will occur for at least one year after commencement of operation.

An Environmental Management Plan (EMP) (Annexure C) has been developed to guide project work, and will be implemented to ensure correct environmental procedure is followed during the construction phase of the project.

Operation and Maintenance

Operation: Once operational, the wind farm would be monitored both by on-site staff and by remote staff. Aspects of the wind farm operation to be dealt with by on-site staff would include safety management, environmental conditions, landowner management, and routine servicing.

Maintenance: Maintenance staff are likely to be on-site throughout the year, making routine checks of the wind turbines on an ongoing basis. Major planned maintenance would be carried out approximately twice a year on each wind turbine. Each planned major maintenance visit would potentially involve three to five maintenance vans onsite.

An EMP (Annexure C) will be implemented to ensure correct environmental procedure is followed during the operation phase of the project.

2.2 Alternatives to taking the proposed action

This should be a detailed description outlining any feasible alternatives to taking the proposed action (including not taking the action) that were considered but are not proposed (note, this is distinct from any *proposed* alternatives relating to location, time frames, or activities – see section 2.3).

The expanded Willogoleche wind farm is an energy generation project, and in particular renewable energy. The alternative would be generating energy from other sources, including from fossil fuels until other renewable sources become viable.

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

If you have identified that the proposed action includes alternative time frames, locations or activities (in section 1.10) you must complete this section. Describe any alternatives related to the physical location of the action, time frames within which the action is to be taken and alternative methods or activities for undertaking the action. For each alternative location, time frame or activity identified, you must also complete (where relevant) the details in sections 1.2-1.9, 2.4-2.7, 3.3 and 4. Please note, if the action that you propose to take is determined to be a controlled action, any alternative locations, time frames or activities that are identified here may be subject to environmental assessment and a decision on whether to approve the alternative.

A number of selection criteria are applied to potential wind farm sites in order to determine site suitability. They include environmental, social, technical and operational criteria, such as good wind resource proximity to a feasible electricity connection point, separation from places of residence, land availability, low ecological and heritage values. The proposed site was targeted due to its ability to meet all above mentioned required criteria, ahead of other possible locations in the wider region.

It is anticipated that construction would start before 2016 and be completed by the end of 2018.

The proposed wind farm should operate for between 20-25 years.

2.4 Context, planning framework and state/local government requirements

Explain the context in which the action is proposed, including any relevant planning framework at the state and/or local government level (e.g. within scope of a management plan, planning initiative or policy framework). Describe any Commonwealth or state legislation or policies under which approvals are required or will be considered against.

This project is proposed in the context of growing global recognition of the need to mitigate the environmental effects associated with fossil fuel energy generation. Such thought has manifested into international, national and State commitments supporting the development of clean and sustainable energy projects. The expanded Willogoleche Wind Farm development will play an important role in addressing both the local and global call for such projects.

Federal Government

The development of the proposed wind farm supports the Federal government's expanded Renewable Energy Target of an additional 45 000 GWh (20 % of demand) of energy to be generated by renewable energy sources by 2020.

The expanded Willogoleche Wind Farm is highly suited to wind energy generation due to a combination of outstanding wind resource and grid capacity at a nearby connection point, as well as meeting other necessary criteria. This will enable the development of a high-yielding and efficient wind farm, providing power for approximately 56 690 average South Australian homes.

The following acts, policies and guidelines apply at the Commonwealth level:

- Aboriginal and Torres Strait Islander Heritage Protection Act 1984
- Environment Protection and Biodiversity Conservation (EPBC) Act 1999
- Native Title Act 1993
- Radiocommunications Act 1992
- Renewable Energy (Electricity) Act 2000 and related 2007 RET target

State Government

The South Australian Government has revealed a number of Sustainable Energy Objectives; highlighted by it introducing the nation's first climate change legislation, which came into effect on 3 July 2007. The Climate Change and Greenhouse Emissions Reduction Act 2007 makes South Australia the first place in Australia to legislate targets to reduce greenhouse emissions. A primary target of this legislation is to "increase the proportion of renewable energy generated so it comprises at least 20 per cent of electricity generated in the State by 31 December 2014." The proposed Willogoleche Wind Farm significantly supports these objectives.

Local Councils

The proposed development falls within the Regional Council of Goyder. As such, a Development Application has been submitted to this council under the South Australian Development Act 1993.

C. L. Rowe and Associates (2010) have conducted a planning and land use assessment for the proposal, where it was found that the development is not contrary to any of the planning provisions or principles of development control within the South Australian planning system. The wind farm was deemed as not likely to interfere with the existing agricultural use of the land.

The following acts, policies and guidelines apply at the State and Local level:

- Aboriginal Heritage Act 1988
- Climate Change and Greenhouse Emissions Reduction Act 2007
- Environment Protection Act 1993
- Fire and Emergency Services Act 2005
- National Parks and Wildlife Act 1972
- Native Vegetation Act 1991
- Development Act 1993 and its associated instruments:
- Development Regulations 2008
- Goyder Council Development Plan – Consolidated 3 June 2010
- Planning Strategy for Regional South Australia – January 2003, amended December 2007
- Environmental Noise Guidelines for Wind Farms – EPA South Australia 2009

The Principles of Development Control relating to *Renewable Energy Facilities* in the Goyder Council Development Plan (2010) state the following:

- Renewable energy facilities, including wind farms and ancillary developments, should be located in areas that maximise efficient generation and supply of electricity
- Wind farms and ancillary development such as substations, maintenance sheds, access roads and connecting power-lines, should be sited, designed and operated in a manner that:
 - (a) avoids or minimises negative impacts on the character, landscape quality, visual significance or amenity of the area

- (b) uses elements of the landscape and appropriate materials and finishes to minimise visual impact
- (c) avoids or minimises the potential for adverse impact on areas of native vegetation, conservation, environmental, geological, tourism or built or natural heritage significance
- (d) does not impact on the safety of water or air transport and the operation of ports, airfields and designated landing strips
- (e) avoids or minimises nuisance or hazard to nearby property owners and/or occupiers, road users and wildlife by not:
 - (i) causing shadowing, flickering, reflection or blade glint impacts
 - (ii) creating excessive noise
 - (iii) interference with television and radio signals
 - (iv) modifying vegetation, soils and habitats
 - (v) striking birds or bats.

2.5 Environmental impact assessments under Commonwealth, state or territory legislation

If you have identified that the proposed action will be or has been subject to a state or territory environmental impact statement (in section 1.11) you must complete this section. Describe any environmental assessment of the relevant impacts of the project that has been, is being, or will be carried out under state or territory legislation. Specify the type and nature of the assessment, the relevant legislation and the current status of any assessments or approvals. Where possible, provide contact details for the state/territory assessment contact officer.

Describe or summarise any public consultation undertaken, or to be undertaken, during the assessment. Attach copies of relevant assessment documentation and outcomes of public consultations (if available).

Under the Development Act 1993, the proposal does not require a formal Environmental Impact Statement. The application will be assessed by the Regional Council of Goyder. The Guide for Applicants – Wind Farms, July 2002, Planning SA, suggests that applicants should aim to ensure that:

- the assessing officers clearly understand what exists on-site and what you are proposing (during construction and as well as the completed development)
- all the potential economic, social and environmental impacts, are identified, including off-site impacts on the neighbouring environment such as visual effect, noise, dust, water run-off etc
- any action you propose to take to minimise impacts on the environment is clearly explained and documented

In light of this guidance and additional information contained in the Planning Bulletin – Wind Farms, August 2002, Planning, the applicant has prepared an Environmental Statement to support the proposal. The Environmental Statement for the expanded Willogoleche Wind Farm references the Proposed Hallett Wind Farm Environmental Statement, May 2004, Wind Prospect, which was used as supporting evidence for the currently consented 26 turbine Willogoleche Wind Farm.

The Environmental Statement reviewed the potential impacts on the following:

- air, soil and water drainage
- ecological
- agricultural and recreational land use
- cultural heritage
- visual amenity
- electromagnetic signals
- roads and traffic
- aviation
- noise
- socio-economic climate
- greenhouse gas savings

2.6 Public consultation (including Indigenous stakeholders)

Your referral must include a description of any public consultation that has been, or is being, undertaken. Where Indigenous stakeholders are likely to be affected by your proposed action, your referral should describe any consultations

undertaken with Indigenous stakeholders. Identify the relevant stakeholders and the status of consultations at the time of the referral. Where appropriate include copies of documents recording the outcomes of any consultations.

During the planning process for the consented 26 turbine wind farm on the Willogoleche Hill, extensive consultation was conducted prior to the planning application and as part of the planning process. For the proposed expanded 37 turbine Willogoleche Wind Farm, the applicant has consulted with stakeholders that would be impacted by the expansion of the proposal from 26 to 37 turbines. Letters were sent to stakeholders notifying them of the proposed extension to the project, and comments were invited.

One of these stakeholders was the Ngadjuri Walpa Juri Lands and Heritage Association. This Aboriginal Heritage group was consulted during the development of the 26 turbine project and has executed a Works Area Clearance Agreement that will be valid for the expanded project. Further consultation with this group will occur post consent to complete on site heritage surveys and prepare for any required construction works monitoring.

In addition a public information forum was held on the 20th October 2010. The public information forum presented information regarding the environmental impact of the proposed expanded Wind Farm of 37 turbines and was attended by over 70 people.

The proposal is likely to be deemed a Category 3 application under the South Australian Planning Act 1993, which means that the neighbours, the public generally and prescribed consultees will be given the opportunity to make representations in respect of the proposal.

2.7 A staged development or component of a larger project

If you have identified that the proposed action is a component of a larger action (in section 1.12) you must complete this section. Provide information about the larger action and details of any interdependency between the stages/components and the larger action. You may also provide justification as to why you believe it is reasonable for the referred action to be considered separately from the larger proposal (eg. the referred action is 'stand-alone' and viable in its own right, there are separate responsibilities for component actions or approvals have been split in a similar way at the state or local government levels).

N/A

3 Description of environment & likely impacts

3.1 Matters of national environmental significance

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

Your assessment of likely impacts should refer to the following resources (available from the Department's web site):

- specific values of individual World Heritage properties and National Heritage places and the ecological character of Ramsar wetlands;
- profiles of relevant species/communities (where available), that will assist in the identification of whether there is likely to be a significant impact on them if the proposal proceeds;
- *Significant Impact Guidelines 1.1 – Matters of National Environmental Significance*; and
- associated sectoral and species policy statements available on the web site, as relevant.

Note that even if your proposal will not be taken in a World Heritage area, Ramsar wetland, Commonwealth marine area, the Great Barrier Reef Marine Park or on Commonwealth land, it could still impact upon these areas (for example, through downstream impacts). Consideration of likely impacts should include both direct and indirect impacts.

3.1 (a) World Heritage Properties

Description

None

Nature and extent of likely impact

Address any impacts on the World Heritage values of any World Heritage property.

3.1 (b) National Heritage Places

Description

None

Nature and extent of likely impact

Address any impacts on the National Heritage values of any National Heritage place.

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

Description

None

Nature and extent of likely impact

Address any impacts on the ecological character of any Ramsar wetlands.

3.1 (d) Listed threatened species and ecological communities

Description

Iron-grass Natural Temperate Grassland of South Australia

Nature and extent of likely impact

Address any impacts on the members of any listed threatened species (except a conservation dependent species) or any threatened ecological community, or their habitat.

ECOLOGICAL COMMUNITY

An ecological assessment for the expanded Willogoleche Wind Farm was undertaken by EBS in February 2010 (Annexure C). During this survey, the vegetation association *Lomandra multiflora* ssp. *dura* (Hard Mat-rush) Open / Very Open Tussock Grassland was identified, and was recorded along the proposed alignment. EBS acknowledged that sections within the *Lomandra multiflora* ssp. *dura* (Hard Mat-rush) Open/Very Open Tussock Grassland association may satisfy criteria under the EPBC Act and consequently may be a critically endangered ecological community under Commonwealth legislation. A further survey was conducted between the 12 -13 October 2010 to establish whether the observed *Lomandra multiflora* ssp. *dura* (Hard Mat-rush) Open/Very Open Tussock Grassland qualified as the Threatened Ecological Community.¹ Figure 4 shows the extent of the threatened community on the proposal area and the report is included as Annexure C.

Six of the seven sites assessed qualified as Condition Class B Iron-Grass Natural Temperate Grassland of South Australia. Generally, these sites were present along the tops of the ridges in the most exposed positions where soils were very shallow and exposed rock covered 5-20 % of the surface area. Lower slopes had a higher percentage of exotic grass species cover and reduced frequency of native herbaceous species, thereby not fulfilling criteria for the threatened ecological community. All sites were exposed to grazing pressure from sheep and Western Grey Kangaroos.

A total of 34 native species were recorded across all sites, of which five are classed as disturbance resistant species. Broad-leaved herbaceous species not on the disturbance resistant list which were recorded at all sites included *Asperula conferta* (Common Woodruff), *Rhodanthe pygmaea* (Pygmy Daisy) and *Vittadinia gracilis* (Woolly New Holland Daisy). Dominant understorey species across all sites were annual weed species and included *Moraea setifolia* (Thread Iris), *Avena* spp. (Wild Oats), *Hordeum vulgare* (Barley Grass) and *Hypochaeris* spp. (Smooth Cats Ear).

The surveys were conducted in the immediate vicinity of the proposed project infrastructure. In this area, a total of 25.9 hectares of the Grade-B Iron-Grass Natural Temperate Grassland of South Australia threatened community was identified on the site. In addition 1.9 hectares of the Grade-C Iron-Grass Natural Temperate Grassland of South Australia was identified.

Preliminary infrastructure designs resulted in the potential for 4.12 hectares of Grade-B Iron-Grass Natural Temperate Grassland of South Australia to be cleared. However, it has been possible to re-design the infrastructure layout to avoid the Grassland as much as possible. As a result, it is proposed that the development will result in the removal of around 0.82 hectares of the Grade-B Iron-Grass Natural Temperate Grassland of South Australia.

BIRDS

In 2004, bird surveys were conducted on 5 wind farms including the Willogoleche Wind Farm. These 5 wind farms are referred to as the Hallett Wind Farm project. No bird species of national conservation significance

¹ It should be noted that whilst this community was identified during the original surveys carried out as part of the 26 turbine development, the community was in poorer condition and had not as yet been listed under the EPBC Act. As such, this community did not form a matter of national significance that was addressed during the original referral (EPBC 2004/1715).

(EPBC Act 1999) were recorded during the survey of the proposed wind farm clusters. These surveys were not repeated for the expanded project, as it was considered unlikely that the species composition would have changed in the region since the original surveys.

The previous surveys found that areas of the proposed clusters which contain native grassland or tussock grassland associations may provide suitable habitat for one species of national conservation significance the Plains-wanderer *Pedionomus torquatus* which is listed as nationally vulnerable. This species is likely to be a seasonal visitor and it is unlikely that more than a few pairs would occur within the area. They may be at risk from colliding with the turbines, however, due to the low numbers of birds occurring within the area, it is unlikely that the species would be significantly impacted upon.

One further bird species of national conservation significance (listed under the EPBC Act 1999) identified from the Environment Australia Database as possibly occurring within the area is the Australian Painted Snipe *Rostratula australis*. It is not expected that these species would be at risk from the proposed development as they either have not been recorded or are not likely to occur within the vicinity of the proposed wind farm.

Three additional species of state conservation significance (either rare or vulnerable) are likely to occur on site but were not observed during the surveys. These include the Australian Bustard and the Diamond Firetail which are considered to be vulnerable at the state level and the Peregrine Falcon which is considered to rare at the state level. If present on site, most of these species would be rare in abundance and irregular visitors to the site. Therefore, the likely impacts on these species by the proposed wind farm are likely to be low.

Because none of these species is (or is likely to be) abundant on the site, and for the reasons stated above, it is unlikely that significant numbers of individuals are at risk of collision with turbines. The risk posed to individuals by the presence of wind turbines is difficult to predict, due to the lack of knowledge of bird-turbine interactions and of bird behaviour, habitat use and flight patterns in an Australian context. As has been shown in modern wind farm designs worldwide, maximising turbine spacings and using solid as opposed to lattice towers to reduce perching opportunities, are key factors in significantly reducing bird strike frequency.

3.1 (e) Listed migratory species

Description

Nature and extent of likely impact

Address any impacts on the members of any listed migratory species, or their habitat.

A total of eight bird species which are listed as migratory under the EPBC Act 1999 were identified in the EPBC online database (Table 3.1). None of these species were observed on-site during the surveys but could potentially be present within the project area, although they are likely to be occasional visitors with most species occurring in low numbers across the region.

Table 3.1. Migratory bird species listed as migratory under the EPBC Act 1999 that are likely to occur on site and/or adjacent to the site.

Species	Status
White-bellied Sea-Eagle (<i>Haliaeetus leucogaster</i>)	Migratory Terrestrial
White-throated Needletail (<i>Hirundapus caudacutus</i>)	Migratory Terrestrial
Rainbow Bee-eater (<i>Merops ornatus</i>)	Migratory Terrestrial
Great Egret (<i>Ardea alba</i>)	Migratory Wetland/ Migratory Marine
Cattle Egret (<i>Ardea ibis</i>)	Migratory Wetland/ Migratory Marine
Latham's Snipe (<i>Gallinago hardwickii</i>)	Migratory Wetland
Painted Snipe (<i>Rostratula benghalensis s. lat.</i>)	Migratory Wetland

Fork-tailed Swift (<i>Apus pacificus</i>)	Migratory Marine
---	------------------

3.1 (f) Commonwealth marine area

(If the action is in 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

N/A

Nature and extent of likely impact

Address any 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

If the action will affect Commonwealth land also describe the more general environment. The Policy Statement titled *Significant Impact Guidelines 1.2 - Actions on, or impacting upon, Commonwealth land, and actions by Commonwealth agencies* provides further details on the type of information needed. If applicable, identify any potential impacts from actions taken outside the Australian jurisdiction on the environment in a Commonwealth Heritage Place overseas.

N/A

Nature and extent of likely impact

Address any impacts on any part of the environment in the Commonwealth land. Your assessment of impacts should refer to the *Significant Impact Guidelines 1.2 - Actions on, or impacting upon, Commonwealth land, and actions by Commonwealth agencies* and specifically address impacts on:

- ecosystems and their constituent parts, including people and communities;
- natural and physical resources;
- the qualities and characteristics of locations, places and areas;
- the heritage values of places; and
- the social, economic and cultural aspects of the above things.

3.1 (h) The Great Barrier Reef Marine Park

Description
N/A

Nature and extent of likely impact

Address any impacts on any part of the environment of the Great Barrier Reef Marine Park.

Note: If your action occurs in the Great Barrier Reef Marine Park you may also require permission under the *Great Barrier Reef Marine Park Act 1975* (GBRMP Act). If so, section 37AB of the GBRMP Act provides that your referral under the EPBC Act is deemed to be an application under the GBRMP Act and Regulations for necessary permissions and a single integrated process will generally apply. Further information is available at www.gbrmpa.gov.au

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

You must describe the nature and extent of likely impacts (both direct & indirect) on the whole environment if your project:

- is a nuclear action;
- will be taken by the Commonwealth or a Commonwealth agency;
- will be taken in a Commonwealth marine area;
- will be taken on Commonwealth land; or
- will be taken in the Great Barrier Reef marine Park.

Your assessment of impacts should refer to the *Significant Impact Guidelines 1.2 - Actions on, or impacting upon, Commonwealth land, and actions by Commonwealth agencies* and specifically address impacts on:

- ecosystems and their constituent parts, including people and communities;
- natural and physical resources;
- the qualities and characteristics of locations, places and areas;
- the heritage values of places; and
- the social, economic and cultural aspects of the above things.

3.2 (a)	Is the proposed action a nuclear action?	X	No
			Yes (provide details below)

If yes, nature & extent of likely impact on the whole environment

3.2 (b)	Is the proposed action to be taken by the Commonwealth or a Commonwealth agency?	X	No
			Yes (provide details below)

If yes, nature & extent of likely impact on the whole environment

3.2 (c)	Is the proposed action to be taken in a Commonwealth marine area?	X	No
			Yes (provide details below)

If yes, nature & extent of likely impact on the whole environment (in addition to 3.1 (h))

3.2 (d)	Is the proposed action to be taken on Commonwealth land?	X	No
			Yes (provide details below)
If yes, nature & extent of likely impact on the whole environment (in addition to 3.1 (i))			
3.2 (e)	Is the proposed action to be taken in the Great Barrier Reef Marine Park?	X	No
			Yes (provide details below)
If yes, nature & extent of likely impact on the whole environment (in addition to 3.1 (j))			

3.3 Other important features of the environment

Provide a description of the project area and the affected area, including information about the following features (where relevant to the project area and/or affected area, and to the extent not otherwise addressed above). If at Section 2.3 you identified any alternative locations, time frames or activities for your proposed action, you must complete each of the details below (where relevant) for each alternative identified.

3.3 (a) Flora and fauna

Flora

Flora surveys were undertaken at the Willogoleche Hill wind farm site during the Spring of 2003, March 2004, the autumn of 2004, February 2005, April 2005 (transmission line vegetation survey), September 2009 and in February 2010. A number of species were observed, including both native species and introduced species. Some species of state and regional conservation significance were recorded, one flora species, *Cryptandra* sp. Long hypanthium (Long-flower *Cryptandra*), which has a rare rating under the NPW Act, was recorded as a scattered species within the *Austrostipa* sp. (Spear-grass) Grassland association. No flora species listed as threatened under the EPBC Act 1999 were detected within the survey area during any of the surveys. The impact on significant species will be minimised by construction activity through a pre-construction site survey and use of an Environmental Management Plan (EMP).

Three different vegetation associations were observed during the flora survey of the proposed site as listed in Table 3.2 and described in Paragraph 3.3 (g). Figure 3 shows the vegetation associations present in the surveyed area. The condition of the vegetation communities varied, with each of the communities having been disturbed through various levels, mainly through grazing. Six areas within the *Lomandra multiflora* ssp. *dura* (Hard Mat-rush) Tussock Grassland were identified during the survey as meeting the criteria of Iron-grass Natural Temperate Grassland of South Australia threatened ecological community under the EPBC Act (discussed above).

Fauna

A fauna survey was conducted at the expanded Willogoleche wind farm site during the spring of 2003 and Autumn of 2004 and again in February 2010 specifically targeting the presence of the Pygmy Bluetongue Lizard. A number of fauna species, both native and introduced, were detected. No nationally threatened fauna species were recorded at the site during the surveys.

It is anticipated that some bird species of conservation significance may occur at the proposed site, as the habitats present in the area are known to support some of these species (EBS, 2004). Listed migratory bird species are also expected to occur within the site, and one migratory bird species was observed during the ecological survey (EBS, 2004).

The surveys suggest that the proposed site potentially supports several bird species that may be susceptible to interactions with wind turbines. However, relatively low numbers of individuals would be expected to occur on site, most occur irregularly or seasonally, and are rare or uncommon in abundance. The nationally

vulnerable Plains-wanderer may potentially use the site, however it would be an irregular visitor and is not likely to occur in significant numbers. Raptor species use of the project area is more likely to bring them into conflict with the wind farm more frequently compared to non-raptor species. Wedge Tailed Eagles were observed on the site and are noted as uncommon (EBS, 2004). There are no Wedge Tailed Eagles nests within the project area. The solid design of the wind turbine towers would discourage perching within the windfarm, and the spacing of the turbines (circa 350m) would reduce the likelihood of a bird strike.

Native Grasslands that exist in the vicinity of the proposed site could provide suitable habitat for the nationally threatened Pygmy Bluetongue Lizard (endangered) and the Flinders Worm Lizard (vulnerable). The fauna surveys in 2010 specifically targeted significant reptiles. However, neither of these species nor any other threatened reptiles were observed during any of the surveys. Despite extensive searches of spider holes within suitable habitat for the Pygmy Bluetongue Lizard (endangered), no specimens were found within the project area.

3.3 (b) Hydrology, including water flows

The water resources of the Willogoleche Range are part of the Broughton River catchment. This catchment falls under the jurisdiction of various government agencies, such as the Northern and Yorke Natural Resources Management Board and the Department of Water, Land and Biodiversity Conservation.

The Broughton River catchment is located in the Mid-North region of South Australia, approximately 130 km north of Adelaide and encompasses an area of 5671 km² (Favier et. al). The river flows into Spencer Gulf and is frequently dry due to low rainfall and groundwater inflows. The watercourses in the catchment once encompassed a wide variety of environments, ranging from open woodlands and low woodlands through to tall open shrublands.

Since European settlement, the majority of the watercourses in the region have been significantly modified, and the biodiversity values of the system are currently low, particularly in terms of a lack of native vegetation following widespread vegetation clearance. There are few natural surface water bodies in the vicinity of the project area that retain water permanently. All creeks and potential wetland areas (low-lying areas) are ephemeral (Favier et. al).

3.3 (c) Soil and Vegetation characteristics

Soil types of the eastern scarp of the Mt Lofty Ranges are dominated by uniform clays or clay loams (Graham *et al.* 2001). The Northern and Yorke Agricultural Districts Integrated Natural Resource Management Plan (NYADINRMC 2003) and West Broughton Soil Conservation Board (2002) indicate further that non-arable, shallow stony soils with variable rock outcrops occur along the majority of the ridges of the Northern Mt Lofty Ranges. Generally soils of the region are formed either on basement rock, or on outwash sediments. Soils vary in physical condition, from hard-setting/sealing surface soils (some with poor subsoil structure), to soils with no significant soil structure problems. Gentle slopes and plains contain mainly deep texture contrast soils with calcareous subsoils, while some areas contain highly saline soils.

Salinity induced by the rising water table in the Hallett region ranges from negligible to moderately high (highly saline seepage). Management of salinity is regarded as one of the top three land management priorities in the Mid-North region (NYADINRMC 2003). It is also noted that some of the high productive gradients and flats within the Mid-North region are at increased risk of surface soil acidification.

3.3 (d) Outstanding natural features

The site comprises undulating, low, moderate and high areas of relief, with moderate to high ranges. The ridges and spurs of the Willogoleche Hill Range (maximum elevation 680 metres AHD) are the main physical features. The ranges are aligned predominantly in a north-south orientation, while the spurs generally run from the ridgeline down to the west. The broad valleys to the west and east of the range sit at approximately 500 m AHD and are characterised by broad shallow flat-bottomed valleys between prominent north-south ranges/ridgelines.

The land within the immediate and more general localities comprises large rural properties that are primarily utilised for farming purposes, more specifically grazing (sheep and some cattle) and cereal cropping (primarily on the lower slopes and flats between the ranges). These agricultural land uses are long established, and past land management practices have generally resulted in the majority of these properties being cleared of any significant native vegetation.

3.3 (e) Remnant native vegetation

The survey area falls within the Broughton Interim Biogeographical Regionalisation of Australia (IBRA) sub-region which is estimated to have 10.7% of the remnant native vegetation remaining. 1.5% of this (1095 hectares) is conserved private protected areas as Heritage Agreements under the Native Vegetation Act 1991 and NPW reserves (EBS, 2010). Section 3.3 (g) describes the vegetation associations present within the surveyed areas of the proposed action.).

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

The expanded Willogoleche Wind Farm is designed to be located along the northern high altitude ridges of, and spurs along the Willogoleche Hill Range. The range is of moderate to high elevation (550-680 m above sea level; Australian Height Datum), predominantly running in a north-south direction. The nearest township is Hallett, which is located approximately 3.5 km east of the proposed site.

The project area contains a number of low-lying ridgelines running north-south, characteristic of that found in the Mid-North region (Graham *et al.* 2001). These ridges form part of the Mount Lofty Block.

The geology of the ridgelines and ranges included in the project area consists of combinations of Proterozoic tillites, quartzites, slates, shales, siltstones and dolomites. There are also Cainozoic slope deposits on some ranges and recent alluvial plains between them (Department of Mines 1964).

3.3 (g) Current state of the environment

Include information about the extent of erosion, whether the area is infested with weeds or feral animals and whether the area is covered by native vegetation or crops.

The area surrounding the site consists predominantly of cleared land utilised for either grazing or cereal cropping. The only site listed as a conservation area within close proximity to the site is Mokota Conservation Park which is located approximately 18 km to the south-east of the site. The project site is currently agricultural land used for either cropping or grazing.

Whilst the project area defined in Paragraph 1.6 covers a total of 2278.6 hectares, the area surveyed was 303.3 hectares. This area was defined by being a 50m buffer around the originally proposed track and cable routes and 100m around the 37 proposed turbine locations. Table 3.2 shows the breakdown of vegetation associations present in the 303.3 hectares surveyed. Figure 3 shows the vegetation associations present in the surveyed area. The predominant vegetation association is 161 hectares of *Austrostipa* sp. (Spear-grass) Grassland. There are 83 hectares of *Lomandra multiflora* of which 21.2 hectares were identified as being the Grade B TEC *Iron-Grass Grassland of South Australia*. A further 4.8 hectares of *Iron-Grass Grassland of South Australia* was identified adjacent to the 303.3 hectares surveyed.

The condition of the vegetation was rated based on criteria adapted from the "Guidelines for Native Vegetation Significant Environmental Benefit policy", (DWLBC 2005). Table 3.2 shows that 70% of the vegetation surveyed has a condition rating of 4:1 or less. This condition is characterised by:

- vegetation structure substantially altered (e.g. one or more vegetation strata depleted)
- retains basic vegetation structure or the ability to regenerate it
- very obvious signs of long-term or severe disturbance
- weed dominated with some very aggressive weeds
- partial clearing (10 – 50% of area)
- evidence of moderate grazing (tracks, browse lines, soil surface crust extensively broken)

Table 3.2 Vegetation Associations Surveyed on Willogoleche Wind Farm within the 303ha study area.

Vegetation association	Hectares	Percentage	Hectares of vegetation with SEB 4:1	Percentage of Association with SEB 4:1 or less
Lomandra multiflora ssp. dura (Hard Mat-rush) Tussock Grassland	83.26	27.46	18.13	21.77
Austrostipa sp. (Spear-grass) Grassland	161.01	53.09	135.49	84.15
Exotic/Native Grassland	17.28	5.70	17.28	100.00
Cropping Land	41.70	13.75	41.70	100.00
Total Area	303.25		212.59	70.1

Table 3.3 below identifies the weed species surveyed. Five weed species detected during the current field survey are listed as declared species under the Natural Resource Management Act 2004. Five environmental weed species were also detected during the current survey.

Table 3.3 Weed species identified within the 303ha study area of the expanded Willogoleche Wind Farm.

Family name	Species name	Common name	Declared species	Environmental species	Vegetation Association		
					1	2	3
BORAGINACEAE	Echium plantagineum	Salvation Jane	✓		✓	✓	✓
COMPOSITAE	Carthamus lanatus	Saffron Thistle		✓	✓	✓	✓
COMPOSITAE	Cynara cardunculus ssp. flavescens	Artichoke Thistle	✓		✓	✓	
COMPOSITAE	Onopordum acaulon	Horse Thistle		✓	✓	✓	✓
COMPOSITAE	Xanthium spinosum	Bathurst Burr	✓				✓
GRAMINEAE	Avena barbata	Bearded Oat		✓	✓	✓	✓
GRAMINEAE	Avena barbata/fatua	Wild Oat		✓	✓	✓	✓
LABIATAE	Salvia verbenaca var. verbenaca	Wild Sage		✓	✓	✓	✓
RESEDACEAE	Reseda lutea	Cut-leaf Mignonette	✓			✓	✓
SOLANACEAE	Lycium ferocissimum	African Boxthorn	✓			✓	✓

Key

Vegetation Association:

1 = *Lomandra multiflora ssp. dura* (Hard Mat-rush) Tussock Grassland

2 = Exotic / Native Grassland

3 = *Austrostipa sp.* Grassland

3.3 (h) Commonwealth Heritage Places or other places recognised as having heritage values
 Results of the desktop archaeological/anthropological studies undertaken by TimeMap Pty Ltd (2003) and Vivienne Wood Heritage Consultant Pty Ltd (2010) revealed that there are no known Aboriginal sites within the project site boundary. On-site surveys conducted for the 26 turbine project in 2007 also failed to reveal any Aboriginal sites within the project area. Site studies will be carried out within the expanded infrastructure

area to identify any sites present. However, it is not expected that any Commonwealth Heritage Places or other places of national heritage interest will be identified on-site.

3.3 (i) Indigenous heritage values

For the original consented Willogoleche Wind Farm, an application pursuant to Section 12 of the Aboriginal Heritage Act 1988 was submitted in 2007. The Aboriginal Affairs and Reconciliation Division (AARD) determined that no Aboriginal Sites or Objects were identified with the project area. For the additional 11 turbines of the expanded Willogoleche Wind Farm, it is proposed that a pre-construction survey of the additional areas that will be required to be disturbed during construction of the wind farm will be conducted by a qualified archaeologist/anthropologist(s) as required, and recognised representatives from the relevant Aboriginal groups. If Aboriginal Sites or Objects are found, discussions with the relevant Aboriginal group will take place to resolve the ways in which to avoid or minimise potential impacts, and the layout design or wind farm features will be altered accordingly if necessary. Management during construction will be negotiated via a cultural heritage agreement detailing the monitoring processes used and actions to respond to additional finds and incidental/accidental disturbance.

No sites of non-indigenous heritage were recorded for the project area. All potential sites, such as old homesteads and ruins will be avoided. Management actions will also be put in place to respond to incidental/accidental disturbance of potential sites.

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

The only site listed as a conservation area within close proximity to the site is Mokota Conservation Park which is located approximately 18 km to the south-east of the site.

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

The land proposed for the project area is freehold land, falling within land Certificate of Titles Volumes listed in section 1.6, in the Hundreds of Anne and Hallett. A number of land uses exist in the region.

3.3 (l) Existing land/marine uses of area

Agricultural Land Use

The project area is located in the Regional Council of Goyder, within the Northern Areas General Farming Zone, which generally encourages the preservation of land for agricultural purposes. Accordingly, the predominant land uses are agriculture based, with the main farming activities being livestock grazing and cereal cropping.

The predominant stock grazed in the area are sheep, with significant sheep stud and stock enterprises occurring in the region. Some cattle grazing also occurs. The project area is in the vicinity of Goyder's line, which provides a guide to the separation point between lands suitable for sustainable cropping and other cultivation, and land that is only suitable for grazing (Flinders Ranges Research 2008). Cereal and other cultivation crops occur on some lower slopes and flats between the ranges. Significantly, once the wind farm is operational, there will be very limited interference with the existing agricultural use of the land.

Recreational Land Use

The Mid-North region is host to a number of recreational activities. The prominent recreational facilities include the Heysen Trail for bushwalking and the Mawson Trail for bicycle riding. Also, the Dare's Hill Circuit Tour is one of the self-drive tours promoted regionally. Both the Mawson and Heysen Trails pass through the Willogoleche Wind Farm in an east-west direction through its southern vicinity.

Experience in both Australia and overseas has shown that recreational activities can successfully continue and coexist with an appropriately designed wind farm, which is the anticipated result of the expanded Willogoleche Wind Farm project.

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

None other.

4 Measures to avoid or reduce impacts

As stated in paragraph 3.1 (d), it is proposed that around 0.82 hectares of the threatened community Iron-Grass Grassland of South Australia will be removed as part of the proposed development.

The original access track and reticulation layout involved the removal of 4.12 hectares of the Grade B threatened community. Following the survey work undertaken in 2010, the track and cable layouts have been re-designed to minimise their impact upon the threatened community. In doing so, the area taken by the tracks and cables has been reduced to 0.46 hectares. Figure 4 and 5 show the revised and original alignments of the access tracks and reticulation.

Seven (7) of the turbines identified in Figure 4 are nominally located within the threatened community. The planning application submitted to the Regional Council of Goyder requests the ability to move the turbines by 100m. It is proposed that three (3) of these turbines (WTG-7, WTG-11, WTG-19) can be moved such that they will not impact on the threatened community. In this way the amount of the threatened community to be removed due to the turbines will be reduced to 0.36 hectares.

The proponent will ensure that the above actions are completed and infrastructure will be moved away from the threatened community wherever this is practical. The proponent is in control of the location of the turbines and track and cable layouts through their contractual control of the commercial contracts that will be put in place between the proponent and the eventual engineering contractor. Leases that the proponent holds with the owners of the land parcels allows for this flexibility. This layout has been submitted for planning approval with the Regional Council of Goyder, including the 100m micro-siting allowance.

To further ensure the protection of the areas of listed *Lomandra* community, it is proposed that the areas of the threatened community will be fenced during the on-site infrastructure survey work which will be required to design the final track and cable alignments and turbine locations, and during construction. In this way it will be possible for on-site workers to accurately determine the locations of the listed areas and ensure that the impact upon the threatened community is minimised.

In addition to the above direct measures to reduce the impact of the proposed development, a number of indirect measures will also be employed.

Environmental Management Plan

An Environmental Management Plan (EMP) has been developed through ongoing consultation with relevant expert groups and individuals, and from the advice of expert consultants, EBS and environmental management regulators. The EMP will inform the construction process and minimise environmental impacts.

It encompasses the construction, operation and decommissioning phases of the project. The EMP is contained in Annexure C. The EMP sets out proposed management actions in relation to the various environmental and social aspects relevant to the project, with stated objectives and a guide to the timing of such actions. Some key actions included in the EMP are:

- Provisions for environmental inductions, training, auditing and compliance review
- Pre-construction surveys to identify any significant fauna and flora species and significant habitat areas that may occur at the construction sites and require avoidance
- Consulting with the Pygmy Blue-tongue Lizard Recovery Team to determine appropriate actions in the case that Pygmy Blue-tongue Lizards are found on-site
- Soil and water management actions to prevent soil erosion, and thus disturbance to potential habitat areas on and off-site
- Actions to prevent existing remnants from potential disturbance from construction activities, including stockpiling of general as well as hazardous materials

The EMP serves as a document from which more detailed works procedures can be developed by

project managers.

Vegetation Management

The proponent is aware that native remnant vegetation exists within the project boundary. These areas were identified during ecological assessments of the project area. Some of these areas are known to contain significant native vegetation or may provide habitat for significant species. The wind turbine layout design takes into consideration the location of such significant areas and avoids them as much as possible. As a result, no significant impacts to EPBC listed species are expected, whilst potential impacts to listed threatened communities have been minimised through a re-design of the project. Nevertheless, there still exists the possibility that unavoidable impacts to other identified remnant areas may arise and that sensitive environments may potentially be altered. In response, a combination of the following procedures will be implemented as required. If, during the course of final design or commencement of construction activities, any areas are identified where native vegetation removal or disruption is required, appropriate measures will be employed (described below). The measures presented here would be further developed during the construction phase, as required.

Further development of these measures would be undertaken in accordance with the South Australian Native Vegetation Act 1991 (in the case that native vegetation is affected), the National Parks and Wildlife Act 1972 (where state listed threatened fauna species are affected), and the Environment Protection and Biodiversity Conservation Act 1999 (in the case that nationally listed threatened species or their habitats are affected).

These procedures will be considered in conjunction with the Environmental Management Plan for the project.

- Native Vegetation Secretariat (NVS) Assessment – Site assessment and notice of permitted actions by the Vegetation Secretariat pursuant to the Native Vegetation Act 1991. This assessment is crucial to obtain any native vegetation clearance permits/exemptions under the Act, which will be accompanied by required offset measures, also in accordance with the Act.
- Native Grassland Management – Investigation of possibility for Set-Aside areas, in consultation with landowners and in accordance with NVS assessment results; promotion of grassland restoration; re-establishment of disturbed grassland areas.
- Monitoring – Any reinstatement work or revegetation or other vegetation management action will be monitored to ensure success of reinstatement, etc.

Fauna Management

Birds

Suitable habitat areas for significant birds have been avoided as much as possible during the wind farm design and planning phase. No wooded areas will require disturbance as part of the wind farm construction, and no wetland or surface water areas that may be potential habitat for wetland species will be disturbed.

A bird monitoring program will be implemented to assess the interaction between the wind farm and local bird populations and is likely to focus on:

- Influence of the wind farm on bird activity in the local area
- Interaction between turbines and birds, or bird-strike

Reptiles

Suitable habitat for significant reptile species, particularly the Pygmy Blue-tongue Lizard and the Flinders Ranges Worm Lizard, have been avoided as far as possible during the wind farm design and planning phase. All areas of potential habitat were surveyed during the optimal period for identification of these species and none were found. Prior to clearance of these areas, a final survey will be completed. If complete avoidance cannot be achieved, relevant experts (e.g. the Pygmy Blue-tongue Recovery Team) will be consulted to determine appropriate actions.

Where regular access for vehicles is required in proximity to identified populations of significant species, the wind farm developer/owner will implement actions to effectively reduce the risk of road-kill to the species. This may include: selective planning of track locations to avoid separation of likely breeding populations;

prescribing speed limits or installing traffic slowing devices (e.g. speed humps) near potential crossing areas; education of site personnel, and; physical access track and verge design, that reduces the attractiveness to lizards for foraging and sunning.

Note: If you have identified alternatives in relation to location, time frames or activities for the proposed action at Section 2.3 you will need to complete this section in relation to each of the alternatives identified.

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

For any measures intended to avoid or mitigate significant impacts on matters protected under the EPBC Act, specify:

- what the measure is,
- how the measure is expected to be effective, and
- the time frame or workplan for the measure.

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

Provide information about the level of commitment by the person proposing to take the action to implement the proposed mitigation measures. For example, if the measures are preliminary suggestions only that have not been fully researched, or are dependent on a third party's agreement (e.g. council or landowner), you should state that, that is the case.

Note, the Australian Government Environment Minister may decide that a proposed action is not likely to have significant impacts on a protected matter, as long as the action is taken in a particular manner (section 77A of the EPBC Act). The particular manner of taking the action may avoid or reduce certain impacts, in such a way that those impacts will not be 'significant'. More detail is provided on the Department's web site.

For the Minister to make such a decision (under section 77A), the proposed measures to avoid or reduce impacts must:

- clearly form part of the referred action (eg be identified in the referral and fall within the responsibility of the person proposing to take the action),
- be must be clear, unambiguous, and provide certainty in relation to reducing or avoiding impacts on the matters protected, and
- must be realistic and practical in terms of reporting, auditing and enforcement.

More general commitments (eg preparation of management plans or monitoring) and measures aimed at providing environmental offsets, compensation or off-site benefits CANNOT be taken into account in making the initial decision about whether the proposal is likely to have a significant impact on a matter protected under the EPBC Act. (But those commitments may be relevant at the later assessment and approval stages, including the appropriate level of assessment, if your proposal proceeds to these stages).

5 Conclusion on the likelihood of significant impacts

Identify whether or not you believe the action is a controlled action (ie. whether you think that significant impacts on the matters protected under Part 3 of the EPBC Act are likely) and the reasons why.

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

- No, complete section 5.2
 Yes, complete section 5.3

5.2 Proposed action IS NOT a controlled action.

Specify the key reasons why you think the proposed action is NOT LIKELY to have significant impacts on a matter protected under the EPBC Act.

The proposed Willogoleche Wind Farm involves the removal of around 0.82 hectares of the Threatened Community *Iron-Grass Grassland of South Australia*. The proponent believes that this action will not be a controlled action if the proponent seeks to minimise the impacts on the threatened grassland areas in accordance with the Environmental Management Plan. This will involve flagging the areas of the Threatened Community prior to the surveys to finalise the alignment of the access tracks and reticulation. This will ensure that the impact can be specifically monitored and minimised. In addition, where practical the turbines will be moved away from the Threatened Community by using the 100m allowance requested in the development approval.

Prior to construction work taking place within the Threatened Community, further surveys for the Pygmy Bluetongue Lizard will take place to confirm the nil findings of the 2010 surveys. Discussions will be on-going the Native Vegetation Council of South Australia in order to agree mitigation proposals for the removal of native vegetation from the site.

5.3 Proposed action IS a controlled action

Type 'x' in the box for the matter(s) protected under the EPBC Act that you think are likely to be significantly impacted. (The 'sections' identified below are the relevant sections of the EPBC Act.)

Matters likely to be impacted

- | | |
|--------------------------|--|
| <input type="checkbox"/> | World Heritage values (sections 12 and 15A) |
| <input type="checkbox"/> | National Heritage places (sections 15B and 15C) |
| <input type="checkbox"/> | Wetlands of international importance (sections 16 and 17B) |
| <input type="checkbox"/> | Listed threatened species and communities (sections 18 and 18A) |
| <input type="checkbox"/> | Listed migratory species (sections 20 and 20A) |
| <input type="checkbox"/> | Protection of the environment from nuclear actions (sections 21 and 22A) |
| <input type="checkbox"/> | Commonwealth marine environment (sections 23 and 24A) |
| <input type="checkbox"/> | Great Barrier Reef Marine Park (sections 24B and 24C) |
| <input type="checkbox"/> | Protection of the environment from actions involving Commonwealth land (sections 26 and 27A) |
| <input type="checkbox"/> | Protection of the environment from Commonwealth actions (section 28) |
| <input type="checkbox"/> | Commonwealth Heritage places overseas (sections 27B and 27C) |

Specify the key reasons why you think the proposed action is likely to have a significant adverse impact on the matters identified above.

6 Environmental record of the responsible party

NOTE: If a decision is made that a proposal needs approval under the EPBC Act, the Environment Minister will also decide the assessment approach. The EPBC Regulations provide for the environmental history of the party proposing to take the action to be taken into account when deciding the assessment approach.

		Yes	No
6.1	<p>Does the party taking the action have a satisfactory record of responsible environmental management?</p> <p>Provide details Although the responsible party, Willogoleche Power Pty Ltd does not have a prior record, its 100% owner, being International Power (Australia) Pty Ltd, (IPR) has a satisfactory record of responsible environmental management. IPR's Australian assets all comply with the highest standards of environmental management. Some examples of note include its Accredited Licence granted by the Victorian EPA to IPR's Hazelwood power station, and its subsequent work in the diversion and rehabilitation of the Eel Hole Creek and associated river wetland systems around the Hazelwood open cut coal mine.</p>	X	
6.2	<p>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?</p> <p>If yes, provide details</p>		X
6.3	<p>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?</p> <p>If yes, provide details of environmental policy and planning framework</p> <p>International Power, as the 100% owner of Willogoleche Power Pty Ltd adheres to its global Corporate Environment Policy, being:</p> <p>"Good Environmental Performance is important to everyone who works within our business. We are committed to achieving the best environmental performance. To achieve this standard and seek continuous improvement, we will:-</p> <ul style="list-style-type: none"> • Comply with all applicable environmental regulations and seek effective working relationships with appropriate agencies. • Implement management systems for environmental performance and seek external accreditation to demonstrate compliance. • Include action plans and measurable environmental targets in our business plans and in personal incentive arrangements at all location levels. • Seek input from and work constructively with our employees, neighbours, regulators and those who work with us by ensuring that we discuss matters in a transparent way and maintain relationships at various levels. • Use natural resources efficiently and in a more sustainable way through integrating environmental, social and economic factors into business decisions, goals and objectives whenever it is practical. • Report our performance honestly and openly." 	X	

6.4 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)		X
---	--	---

7 Information sources and attachments

(For the information provided above)

7.1 References

- List the references used in preparing the referral.
- Highlight documents that are available to the public, including web references if relevant.

Favier D, Scholz G, Vanlaarhoven J, Bradley J and Phillips L (December 2004). A River Management Plan for the Broughton Catchment. DWLBC. Adelaide.

EBS (2004). Hallett Wind Farm Ecological Assessment. Environmental and Biodiversity Services, Keswick.

EBS (2010). Willogoleche Hill Wind Farm. WTG01 – WTG026. Ecological Assessment. Environmental and Biodiversity Services

EBS (2010). Willogoleche Hill Wind Farm. Extension. Ecological Assessment. Environmental and Biodiversity Services

EBS (2010). Willogoleche Wind Farm Assessment against the EPBC Criteria for Iron-grass Grassland Threatened Ecological Community. Environmental and Biodiversity Services

C L Rowe (2010). Proposed expanded Willogoleche Hill wind farm – Planning and Land Use Assessment. C L Rowe and Associates Pty Ltd

7.2 Reliability and date of information

For information in section 3 specify:

- source of the information;
- how recent the information is;
- how the reliability of the information was tested; and
- any uncertainties in the information.

The impacts on the Threatened Community and potential Threatened Communities are based on surveys completed in 2010 and listed in 7.1 above.

7.3 Attachments

Indicate the documents you have attached. All attachments must be less than two megabytes (2mb) so they can be published on the Department's website. Attachments larger than two megabytes (2mb) may delay the processing of your referral.

		✓ attached	Title of attachment(s)
You must attach	figures, maps or aerial photographs showing the project locality (section 1)	✓	Figure 1 and 2 Annexure A
	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)	✓	Figure 3 and 4 Annexure A
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)	✓	Included Planning and Land Use Assessment as Annexure D
	copies of any flora and fauna investigations and surveys (section 3)	✓	Annexure C

technical reports relevant to the assessment of impacts on protected matters that support the arguments and conclusions in the referral (section 3 and 4)		
report(s) on any public consultations undertaken, including with Indigenous stakeholders (section 3)		

8 Contacts, signatures and declarations

NOTE: Providing false or misleading information is an offence punishable on conviction by imprisonment and fine (s 489, EPBC Act).

Under the EPBC Act a referral can only be made by:

- the person proposing to take the action (which can include a person acting on their behalf); or
- a Commonwealth, state or territory government, or agency that is aware of a proposal by a person to take an action, and that has administrative responsibilities relating to the action².

Project title:

8.1 Person proposing to take action

This is the individual, government agency or company that will be principally responsible for, or who will carry out, the proposed action.

If the proposed action will be taken under a contract or other arrangement, this is:

- the person for whose benefit the action will be taken; or
- the person who procured the contract or other arrangement and who will have principal control and responsibility for the taking of the proposed action.

If the proposed action requires a permit under the Great Barrier Reef Marine Park Act³, this is the person requiring the grant of a GBRMP permission.

The Minister may also request relevant additional information from this person.

If further assessment and approval for the action is required, any approval which may be granted will be issued to the person proposing to take the action. This person will be responsible for complying with any conditions attached to the approval.

If the Minister decides that further assessment and approval is required, the Minister must designate a person as a proponent of the action. The proponent is responsible for meeting the requirements of the EPBC Act during the assessment process. The proponent will generally be the person proposing to take the action⁴.

Name	Simon Klapish
Title	Business Development Manager
Organisation	Willogoleche Power Pty Ltd
ACN / ABN (if applicable)	ABN 22 112 307 589
Postal address	Level 37, Rialto North Tower, 525 Collins Street, Melbourne VIC 3000
Telephone	03 9617 8315
Email	simon.klapish@ipplc.com.au
Declaration	I declare that the information contained in this form is, to my knowledge, true and not misleading. I agree to be the proponent for this action.
Signature	
Date	20.1.11

² If the proposed action is to be taken by a Commonwealth, state or territory government or agency, section 8.1 of this form should be completed. However, if the government or agency is aware of, and has administrative responsibilities relating to, a proposed action that is to be taken by another person which has not otherwise been referred, please contact the Referrals Business Entry Point (1800 803 772) to obtain an alternative contacts, signatures and declarations page.

³ If your referred action, or a component of it, is to be taken in the Great Barrier Reef Marine Park the Minister is required to provide a copy of your referral to the Great Barrier Reef Marine Park Authority (GBRMPA) (see section 73A, EPBC Act). For information about how the GBRMPA may use your information, see http://www.gbrmpa.gov.au/privacy/privacy_notice_for_permits.

⁴ If a person other than the person proposing to take action is to be nominated as the proponent, please contact the Referrals Business Entry Point (1800 803 772) to obtain an alternative contacts, signatures and declarations page.

8.2 Person preparing the referral information (if different from 8.1)

Individual or organisation who has prepared the information contained in this referral form.

Name Stuart Whiting
Title Development Manager
Organisation Wind Prospect Pty Ltd
ACN / ABN (if applicable)
Postal address PO Box 389, Christies Beach, SA 5165
Telephone 08 8384 7755
Email stuart.whiting@windprospect.com.au
Declaration I declare that the information contained in this form is, to my knowledge, true and not misleading.

Signature



Date

20/1/11

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 complete contact details and signed the form?
- ✓ Provided copies of any documents referenced in the referral form?
- ✓ Ensured that all attachments are less than two megabytes (2mb)?
- ✓ Sent the referral to the Department (electronic and hard copy preferred)?

Annexure A – Figures

Figure 1: Project Overview

Figure 2: Project Boundary

Figure 3: Overview of vegetation associations

Figure 4: Impact of Revised Infrastructure on Threatened Community

Figure 5: Impact of Original Infrastructure on Threatened Community

Annexure B – EPBC Act Protected Matters Report

Annexure C – 2010 Ecology Survey Reports

1. EBS Ecology, 2010 Survey – WTG01 – WTG26
2. EBS Ecology, 2010 Survey – B-WTG01 to B-WTG012
3. EBS Ecology, 2010 Survey – Iron-Grass Grassland of South Australia Survey
4. EBS Ecology, 2004 Survey – Hallett Wind Farm Ecological Assessment
5. Expanded Willogoleche Wind Farm – Environmental Management Plan (EMP)

Annexure D – Additional Reports

C L Rowe (2010), Planning and Land Use Assessment