Australian Government

Department of the Environment and Water Resources

Referral of proposed action

What is a referral?

The *Environment Protection and Biodiversity Conservation Act 1999* (the EPBC Act) protects matters of national environmental significance (NES), the environment in relation to Commonwealth actions and actions on or impacting upon Commonwealth land. The purpose of a referral is to determine whether your proposed action will need formal assessment and approval under the EPBC Act.

Your referral will be the principal basis for the Minister for the Environment and Water Resources' decision as to whether approval is necessary and, if so, the type of assessment that will be taken. These decisions are made within 20 business days.

When do I need to make a referral?

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

- World Heritage (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)
- Marine environment (sections 23 and 24A)
- Protection of the environment from actions involving Commonwealth land (sections 26 and 27A)
- Protection of the environment from Commonwealth actions (section 28

OR

- actions that may 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
- actions by Commonwealth Authorities that are likely have a significant impact on the environment require approval.

You may still make a referral if you believe your action is not going to have a significant impact, or if you are unsure.

To help you decide whether or not your proposed action requires approval (and, therefore, if you should make a referral), read the following documents, available from the Department web site:

- the Policy Statement titled *Principle Significance Guidelines 1.1 – Matters of National Environmental Significance* . Additional sectoral guidelines are also available.
- the Policy Statement titled *Principle Significance Guidelines 1.2 - Actions on, or impacting upon, Commonwealth land, and actions by Commonwealth agencies*.
- the interactive map on the web site–enter a location to obtain a report on what matters of NES may occur in that location.

A staged or component action

An action that is a component of a larger action may not be accepted separately and may require referral of the larger action for consideration under the EPBC Act. Refer to *Fact Sheet 6: Staged Developments/Split Referrals*.

If you want to make a referral for a staged or component referral, contact the EPBC Act Referrals Section (1800 803 772).

Permits

Some activities may also require a permit under other sections of the EPBC Act, whether or not approval is required. Information is available on the Department web site.

Completing the referral form

Completing this form will help ensure that you submit the information required by the EPBC Regulations.

All referrals MUST be published on the Department's web site for public comment (the Department will arrange this) and should generally be:

- readily understood by the public
- no longer than 25 A4-sized, single-sided pages
- typed (main text no smaller than 11 points)
- have clearly legible maps and diagrams
- supplied unbound or electronically.

Provide supporting documentation, such as environmental reports or surveys, as attachments. However, the referral form must contain the core information, so that it provides an adequate basis for public comment and decision-making.

Provide coloured maps, figures or photographs to help explain the project and its location. 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.

Using the MS Word file to enter your information

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

Instructions are provided in green text. If you do not see the instructions you need to reveal 'hidden' text. A toolbar with buttons to turn the instructions on and off should be visible when you open the file.

Normally the instruction text will not print. (If you wish to print a copy of the form with the instructions you will need to select the Options button in the Print dialog and select Hidden text.)

Submitting the referral form

By mail to

EPBC Act Referrals Section
Environment Assessment Branch
Department of the Environment and
Water Resources
GPO Box 787
CANBERRA ACT 2601

By fax to 02 6274 1789

- Referrals 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.

By 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.
- To ensure file sizes are not too large (below two megabytes), enclose maps and figures as separate files if necessary. If unsure, send a question to the email address.
- Follow up with a mailed hardcopy including copies of any attachments or supporting reports.

What happens next?

The Department will write to you at the end of the 20 business day period to advise you of the outcome of your referral and whether or not formal assessment and approval under the EPBC Act is needed. There are three types of decisions about the referral.

The proposed action is NOT LIKELY to be significant 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 state or local government requirements).

The proposed action is NOT LIKELY to be significant IF undertaken in specified manner

The specified 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 specified manner to the Department.

The proposed action is LIKELY to be significant and does NEED approval

The proposed action is subject to a public assessment process before it can be considered for approval. The level of assessment will be decided at the same time. (Further information about the levels of assessment and basis for deciding the approach are available on the web site.)

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

Compliance audits

The Department may audit your project at any time to ensure that it was completed in accordance with the information provided in the referral or the stated particular manner. If the project changes, such that the degree of significance could vary, you should write to the Department to advise of the changes, and likely significance, or discuss with the EPBC Act Referrals Section (1800 803 772).

For more information

- call the Department of the Environment and Water Resources 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 this web page.

Referral of proposed action

Project title	**Badgingarra Wind Farm**

1 Contacts

1.1	**Referring party**	Person, agent or agency who is making the referral Bruce Mitchell Study Manager – Pre-feasibility Study for Badgingarra Wind Farm Enthalpy Pty Ltd 198b Latrobe Terrace, Paddington Qld 4064 Australia (07) 3367 2737 Bruce Mitchell [bmitchell@Enthalpy.Com.Au]
1.2	**Responsible party**	Person responsible for or who will carry out the proposed action. If same as 1.1, write 'as above' Wayne Trumble – EGM Power Generation (Griffin Windfarm II Pty Ltd) Derek Hannigan – Business Development Manager (Stanwell Corporation Ltd) Joint Venture between Griffin and Stanwell Corporation Limited
	Postal address	Griffin Windfarm II Pty Ltd: GPO Box G474, Perth WA 6000 Stanwell Corporation Limited: GPO Box 773, Brisbane Qld 4001 Griffin Energy: (08) 9261 2800 Stanwell Corporation: (07) 3335 7444
1.3	**Proponent**	Person responsible for preparing assessment documentation, if approval is required. If same as 1.2, write 'as above' As above

2 Summary of proposed action

NOTE: You must attach an A4 size map/plan(s) showing the location and approximate boundaries of the area in which the project is to occur.

2.1 **Short description**

Stanwell Corporation and Griffin Windfarm II Pty Ltd propose to develop a wind farm ("the Badgingarra Wind Farm") capable of generating an energy output of 130 MW for supply to the energy market. A pre-feasibility study has been based on options ranging from 43 (3 MW wind turbine generators (WTGs)) to 65 (2 MW WTGs); The type and number of WTGs will be selected during a feasibility study but would be within this range. The proposed site is located approximately 180 kms north of Perth and 30 kilometres east/north-east of the coastal town of Cervantes in the Shire of Dandaragan, Western Australia.

2.2 **Latitude and longitude**

	Latitude			Longitude		
location point	degrees	minutes	seconds	degrees	minutes	seconds
NW	30	19	40	115	14	30
N (Hill R)	30	17	00	115	19	00
N	30	20	00	115	19	00
NE	30	18	50	115	24	40
SE 1	30	23	10	115	25	20
S 1	30	24	20	115	20	50
S 2	30	26	10	115	21	10
SE 2	30	28	40	115	23	40
SW 1	30	28	20	115	16	00
SW 2	30	26	30	115	13	00

2.3 **Locality**

The proposed Badgingarra Wind Farm site is located between Perth and Geraldton in Western Australia, approximately 30 km east of Cervantes. An aerial photo showing the proposed wind farm layout and a locality map are provided as Attachment 1.

2.4 **Size of the development footprint or work area (hectares)**

The proposed wind farm site is approximately 22,720 hectares and spread over seven farming properties.

2.5 **Street address of the site**

The site is an irregular shape and incorporates seven farming properties. It is bounded by Hill River to the north, Bibby Road to the south, Badgingarra National Park to the east and Munbinea Road to the west.

2.6	**Lot description**	Following are the respective title descriptions that pertain to the major parcels of the study area within which the Badgingarra Wind Farm will be sited (note that these titles (searches) are only current from that date in which they were undertaken - October 2006): • Lot 3747 on Deposited Plan 207067; • Lot 3754 on Deposited Plan 207065; • Lot 3850 on Deposited Plan 209077; • Lot 3742 on Deposited Plan 207066; • Lot 3739 on Deposited Plan 207069; • Lot 3743 on Deposited Plan 207069; • Lot 3744 on Deposited Plan 207069; • Lot 3745 on Deposited Plan 207067; • Lot 50 on Plan 20080; • Lot 3755 on Deposited Plan 207065; • Lot 51 on Plan 20080; • Lot 3704 on Deposited Plan 206786; • Lot 3753 on Deposited Plan 207071; • Lot 3748 on Deposited Plan 207071; • Lot 3728 on Deposited Plan 206644; • Lot 3738 on Deposited Plan 207066; • Lot 1651 on Deposited Plan 133599; and • Lot 3774 on Deposited Plan 207065.
2.7	**Local Government Area and Council contact (if known)**	The local planning authority is the Shire of Dandaragan.
2.8	**Project life**	The proposed wind farm will operate for a minimum period of 20 years.

2.9	**Alternatives**	X	No
			Yes, complete section 3.2
2.10	**State assessment**		No
		X	Yes, complete Section 3.5
2.11	**Component of larger action**	X	No
			Yes, complete Section 3.6

3 Detailed project description

NOTE: The proposal described here is the action(s) on which ALL subsequent decisions under the EPBC Act will be made, including decisions on significance, level of assessment (if needed) and approval (if needed). It is therefore important that the description is complete and includes all components and activities associated with the action, as well as any specific alternatives to be assessed. If certain related components are not intended to be included within the scope of the referral, this should be clearly explained in Section 3.6.

3.1 Description of proposal

Enthalpy Pty Ltd has been engaged as Study Manager to carry out a Pre-feasibility Study on behalf of Stanwell Corporation Limited and Griffin Windfarm II Pty Ltd to evaluate the viability of the proposed Badgingarra Wind Farm (BWF). The study area used for the pre-feasibility study, within which the BWF would be sited, is located approximately 180 kms north of Perth and 30 kilometres east of the coastal town of Cervantes in the Shire of Dandaragan, Western Australia. The study area for the proposed BWF is located immediately to the north of the existing Emu Downs Wind Farm (EDWF), which is currently owned by Stanwell Corporation Limited and Griffin Windfarm II Pty Ltd.

The BWF involves the development of a wind farm capable of generating an energy output of 130 MW for supply to the energy market. The pre-feasibility study has been based on options ranging from 43 (3 MW WTGs) to 65 (2 MW WTGs). Given the higher average wind speeds within the study area for the BWF than at the EDWF, larger WTGs will be required than the 1.65 MW WTGs used at EDWF. Although the WTGs will be larger, there will be far fewer WTGs than the 78 that would be required to meet the 130 MW if the same WTGs were able to be used. The project would also include a new substation, 22kV in ground reticulation, a small grid interconnection (some few kilometres) to a new transmission line (intended to pass through the study area as part of the intended upgrade of the Cataby to Enneaba line by Western Power), and associated site roads and infrastructure (e.g. administration building).

The pre-feasibility study is ongoing and the decision on turbine supplier/type for the project will not be made until well into a feasibility study for the project, should the proponents proceed with full feasibility assessment.

Details for the two WTG types options (2 MW or 3 MW WTGs) used were as follows:

- 3 MW machine case:
  Vestas V90 machine (80 m hub height, 90 m rotar diameter, 125 m to tip of blade from ground). There would be 43 of these (making 130 MW); and

- 2 MW machine case:
  REpower MM82 machine (80 m hub height, 82 m rotar diameter, 121 m to tip of blade from ground). There would be 65 of these (making 130 MW).

Preliminary (indicative) layouts for the above two WTG types are given in the attached map - *Badgingarra Wind Farm Study Area: Preliminary Layouts for MM82 (65 x 2MW) and V90 (43 x 3 MW) Cases.*

Further details of the Vestas V90 machines can be found at www.vestas.com and of the REpower MM82 machines can be found at www.repower.de.

A map showing the study area and preliminary layouts for the two cases is provided in Attachment A. Also included in Attachment A is the same map reproduced over the top of an aerial photograph of the study area. These maps also show the existing EDWF and the locations of its 48 WTGs.

The turbine types and preliminary layouts, whilst indicative only at this stage, are considered suitably representative to cover the range of possible WTG types for the wind farm and their ultimate locations within the study area. The locations should not need to change significantly, as the locations of the preliminary layouts reflect the most advantageous elevated positions to site the WTGs.

A Flora and fauna investigation/impact assessment has been carried out for both WGT options using 2 MW or 3 MW WTGs).

The layout of access tracks and turbines will be carefully designed in areas to avoid native vegetation. At this stage it is not anticipated that there will be any requirement to clear native vegetation, however this will be determined during the detailed design phase.

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

Site targeted for suitability to develop a wind farm.

The anticipated project timetable is as follows:

- Feasibility study and financial close completed by mid-2008; and then based on a decision to proceed with the project,
- Construction on-site would commence in late 2009 with commissioning complete by the end of 2010.

3.3 Previously considered alternatives and the 'do nothing' case

Site targeted for suitability to develop a wind farm.

3.4 Context, planning framework and state/local government requirements

The Shire of Dandaragan's Town Planning Scheme No.7 (2006) and District Planning Strategy (1998) will apply.

The following state policies and authorities will need to be assessed as part of the evaluation of the proposed wind farm:

- State Planning Strategy (1997)
- State Planning Framework Policy (Variation No. 2) (2006)
- Statement of Planning Policy No. 1 (SPP No. 1) (2006)
- Central Coast Regional Strategy (CCRS) 1996
- Central Coast Regional Strategy Land Use Plan (1996)
- Planning and Development Act (2005)
- Planning Bulletin No. 67 – Guidelines for Wind Farm Development (PB No. 67) Western Australian Planning Commission (1994)
- Environmental Protection Act 1986
- Environmental Protection (Noise) Regulations (1997).

3.5 Environmental impact assessments under Commonwealth, state or territory legislation

The environmental approval process will include referral under the EPBC Act and impact assessment if deemed a controlled action.

Should the project continue into full feasibility assessment, an application for Planning Consent will be made with the Shire of Dandaragan. The application will include detailed environmental impact assessment and mitigation measures for protection of environmental values, including noise, flora and fauna, landscape and visual, cultural heritage, etc. Due to the variety of environmental aspects associated with a proposed wind farm (i.e. visual, noise, flora and fauna etc.), the Shire of Dandaragan will be obliged to refer any application for Planning Consent to the Environmental Protection Authority (EPA) in accordance with Section 38 of the *Environmental Protection Act 1986* (EP Act).

In response to the referral, the EPA is required to make a determination as to whether or not a formal environment assessment will be required. The existing Emu Downs Wind Farm was determined to require only informal assessment, and the EPA provided comment and recommended conditions of approval to the Shire of Dandaragan for inclusion within the Planning Consent. During preliminary discussions in April 2007 staff of the WA Department of Environment and Conservation indicated that informal assessment may again be all that is required for the proposed development, given the experience and positive outcomes with the neighbouring Emu Downs Wind Farm development. This will be dependent on the EPA's view of potential for impact on environmental values (e.g. noise, landscape and visual, flora and fauna, etc.). Should the EPA decide to impose a formal environmental assessment then this would be pursuant to Section 40 EP Act.

Should the proposal proceed to full feasibility assessment, a project Public Consultation Plan will be developed and implemented. The plan will apply to the feasibility study, and if the project proceeds, with the construction, commissioning and long-term operation of the wind farm.

The plan will ensure the project's benefits are maximised and any potential issues (particularly with neighbours) are managed proactively and effectively. The plan will take into account all

potential stakeholders and associated issues. It will include activities such as community meetings, media releases, open letters to the community, fact sheets and appropriate displays.

The key communication objectives for the project, which will be highlighted in the plan, are:

- continue to build and enhance the favourable relationship that the proponents have with the local community;
- identify and proactively manage issues throughout all phases of the project; and
- effectively manage all stakeholder expectations and respond in a timely manner.

The strategic approach to the project's communication activities incorporates the following elements:

- continue to engender trust and support-building on relationships already formed with stakeholders and using local community leaders to help counteract negative issues;
- continue to as an open and transparent organisation through ongoing consultation and communication with key stakeholders; and
- integrate all Landowners and neighbours into all communication activities and address and respond to issues early.

3.6 A staged development or component of a larger project

NOTE: The Minister for the Environment and Water Resources may not accept a referred 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 EPBC Act Referrals Section (1800 803 772).

The proposal is to develop a new wind farm capable of generating an energy output of 130 MW for supply to the energy market. No additional stages are currently envisaged or being planned for by the proponents.

4 Affected environment

NOTE: You must attach a map(s)/plan(s) clearly showing the location of the action in relation to any matters of national environmental significance

4.1 Matters of national environmental significance

A 20 kilometres buffered on-line search of the EPBC Act Protected Matters Search Tool (DEWR 2007) revealed that no world heritage properties, no national heritage places, no wetlands of international significance and no threatened ecological communities occur on or near the proposed wind farm site. The search tool generated a list of 22 listed threatened species (1 bird, 1 mammal, and 20 plants) and five listed migratory species (all birds – 2 terrestrial and 3 marine flyover species) for the same search area.

4.1 (a) World Heritage Properties

NA

4.1 (b) National Heritage Places

NA

4.1 (c) Wetlands of International Significance (Ramsar)

NA

4.1 (d) Listed threatened species and ecological communities

The proposed wind farm site has been subject to a Level One risk assessment for birds (as per the AusWind 2005 Guidelines). In addition, an assessment of the flora and fauna of the site has been undertaken, and a Level Two, targeted risk assessment for the Carnaby's Black-Cockatoo (*Calyptorhynchus latirostris*), the listed threatened species that occurs in the region. These studies are all included in the attached report: *Proposed Badgingarra Wind Farm: Flora and Fauna Assessment and Bird Utilisation Survey* (Brett Lane & Associates, 2007).

The Carnaby's Black-Cockatoo is considered to be nationally endangered under the EPBC Act, listed as endangered in Western Australia (WATSSC 2003) and listed under the *Wildlife Conservation Act 1950* (WC Act). It is also listed as endangered in the Action Plan for Australian Birds (Garnett and Crowley 2000) and a recovery plan (Cale 2003) has been written for this species.

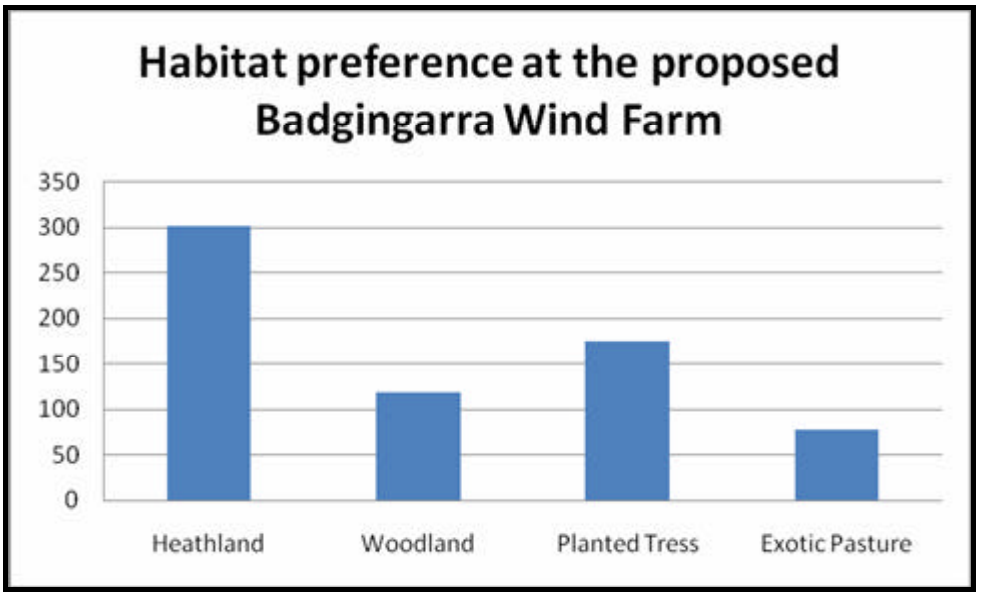
This is the only nationally threatened species that was recorded during the flora and fauna assessments at the proposed wind farm site. Carnaby's Cockatoo is endemic to the south-west of Western Australia, its range extending from the Murchison River to Esperance, and inland to Coorow, Kellerberrin and Lake Cronin (Saunders 1974, Saunders & Ingram 1995, Johnstone & Storr 1998). The range of this cockatoo has declined by one third between the 1970's and 1990's (Saunders & Ingram 1995) and has been pushed further south and further west due to land clearing for agricultural purposes.

The preferred habitat of the Carnaby's Cockatoo is uncleared and remnant native woodlands dominated by eucalyptus, particularly Wandoo and Salmon Gum. It often utilises surrounding sand plains in shrubland or Kwongan Heathland, dominated by *Hakea, Dryandra, Banksia* and *Grevillia* (Higgins 1999). Carnaby's Cockatoo breed from July to November in woodlands in the wheatbelt region (Johnstone & Storr 1998). They require large hollows in live or dead standing trees for nesting purposes. After breeding, the cockatoo migrates southwards and coastwards. The proposed wind farm site is part of the cockatoos' non-breeding range.

Detailed information was collected on this species' use of the proposed wind farm site and surrounding region. This showed that the habitats most used by the species in the region were :

- Roadside and remnant Kwongan Heathland;
- Remnant taller woodland;
- Planted shelter belts (eucalypt and exotic pine); and
- Exotic Pasture.

The graph below shows that the numbers of Carnaby's Black-Cockatoos observed in each habitat type during site investigations (out of over 500 birds sighted) undertaken in early autumn 2007 by Brett Lane & Associates (refer attached Brett Lane & Associates, 2007 report).



During the day, birds were observed to forage in Kwongan Heathland patches and to a lesser extent exotic pasture, flying to taller woodland and planted shelter belts to roost during the day or night. The cockatoos were infrequently observed near open, cleared ridges and tended to move at low elevations (<10 metres above the ground) within the more sheltered parts of the site, such as between ridges and in gullies.

The Western Quoll (*Dasyrus geoffroii*) was flagged by the EPBC Act Protected Matters Search Tool as having potential habitat in the search area. The quoll is considered to be nationally vulnerable under the EPBC Act, listed as vulnerable in Western Australia (WATSSC 2003) and listed as threatened under the WC Act. This species prefers jarrah forests, dry woodlands and mallee

shrubland (Menkorst and Knight 2001). The woodland habitat at the study site is small and isolated from other preferred habitats of the Western Quoll. Due to the lack of extensive suitable habitat it is considered unlikely that this species would regularly occur at the proposed wind farm site.

Listed threatened plant species with the potential to occur on the site were obtained from the EPBC Act Protected Matters search tool. These, and their likelihood of occurrence, are tabulated below.

Table 1: Listed plant species from the EPBC Act Protected Matters Search Tool

Scientific Name	Common Name	Status	Habitat Preference	Likelihood of occurrence
Andersonia gracilis	Slender Andersonia	Endangered	Sand	Low
Anigozanthos viridis subsp. *Terraspectans*	Dwarf Green Kangaroo Paw	Vulnerable	Sand	Low at site, moderate on roadside reserves
Dryandra serratuloides subsp. *Perissa*	Northern Serrate Dryandra	Vulnerable	Low dense heath and also in low open woodland	Low, too far west
Dryandra serratuloides subsp. *Serratuloides*	Southern Serrate Dryandra	Vulnerable	Low dense heath and also in low open woodland	Low, too far west
Eucalyptus absita	Badgingarra Box	Endangered	White lateritic sand	Low
Eucalyptus balanites	Cadda Road Mallee, Cadda Mallee	Endangered	Sandy heathland, only occurs in Badgingarra National Park	Low
Eucalyptus johnsoniana	Johnson's Mallee	Vulnerable	Duplex sand	Low
Eucalyptus lateritica	Laterite Mallee	Vulnerable	White or grey sand with gravel. Lateritic breakaways & mesas	Low, too far south
Eucalyptus leprophloia	Scaly Butt Mallee, Scaly-butt Mallee	Endangered	Black sand	Low, too far south
Eucalyptus pruiniramis	Midlands Gum, Jingymia Gum	Endangered	Skeletal soils over sandstone or laterite. Rocky hillslopes	Low, too far west
Eucalyptus suberea	Cork Mallee, Mount Lesueur Mallee	Vulnerable	Grey sand. Near or on lateritic breakaways	None
Grevillea curviloba subsp. *Incurva*	Narrow curved-leaf Grevillea	Endangered	Sand, sandy loam	Low
Grevillea humifusa	Spreading Grevillea	Endangered	Gravelly loam over laterite	Low

Scientific Name	Common Name	Status	Habitat Preference	Likelihood of occurrence
Hakea megalosperma	Lesueur Hakea	Vulnerable	Low heath in grey sand and lateritic gravel or laterite boulders on hilltops and ridges	High – recorded in one patch of vegetation on the site (see below)
Macarthuria keigheryi	Keighery's Macarthuria	Endangered	White or grey sand	Low
Paracaleana dixonii Hopper & A.P.Brown ms.		Endangered	Sand	Low at study site, moderate on road reserves
Patersonia spirafolia	Spiral-leaved Patersonia	Endangered	Sand, gravel	Low at study site, moderate on road reserves
Ptychosema pusillum	Dwarf Pea	Vulnerable	Sandy rises	Low at study site, moderate on road reserves
Spirogardnera rubescens	Spiral Bush	Endangered	Clay gravel – Wondoo	Low
Thelymitra stellata	Star Sun-orchid	Endangered	Low heath and scrub in Jarrah and Wandoo woodland, and in low heath on lateritic hill tops	Low at study site, moderate on road reserves or in ungrazed areas

Most of the listed threatened plant species are considered to have a low likelihood of occurrence on the proposed wind farm site due to past removal of native vegetation from the area for agricultural development. One species, Leseur's Hakea (*Hakea megalosperma*) was recorded in one intact remnant of native vegetation in the far south western part of the site, adjacent to the southern boundary of the Badgingarra National Park. This remnant will not be affected by the proposed wind farm.

4.1 (e) Listed migratory species

Five species of migratory birds were indicated by the EPBC Act Protected Matters Search Tool (DEWR 2007) as potentially occurring in the region. These are listed in Table 2 below. None of these species were recorded at the proposed wind farm site during the current investigations. There is potential habitat for these species to occur at the site although there have been no records of them on or near the site (based on New Atlas of Australian Birds data available through the Birds Australia website), with the exception of the Great Egret. The Great Egret may occasionally occur at the site, particularly in wetland habitats when these hold water in winter and spring. The other species either have not been recorded in the heathlands of the region or they are strictly coastal (e.g. the sea-eagle).

Table 2: Listed migratory species from the EPBC Act Protected Matters Search Tool

Common Name	Scientific Name	EPBC	WATSSC	WC	Likelihood of regular occurrence

Common Name	Scientific Name	EPBC	WATSSC	WC	Likelihood of regular occurrence
Cattle Egret	*Ardea ibis*	M			Low
Fork-tailed Swift	*Apus pacificus*	M			Low
Great Egret	*Ardea alba*	M			Moderate
Rainbow Bee-eater	*Merops ornatus*	M			Low
White-bellied Sea-Eagle	*Haliaeetus leucogaster*	M			Low

Notes: EPBC – Status under EPBC Act; WATSSC – Status from WA Threatened Species Scientific Committee (2003); WC – Listed under Wildlife Conservation (WC) Act ; M – Migratory species.

The surveys were carried out from 16 – 23 March which is an appropriate time of year for Fork-tailed Swift (present in Australia during summer and early autumn), Great Egret (could occur in the area at any time of year – not strictly migratory), White-bellied Sea-Eagle (same comments as for Great Egret), and possibly Rainbow Bee-eater (present spring-summer, most leave Perth area by third week of March but some in the south-west of WA can remain until April: Higgins 1999). The Cattle Egret generally arrives in south-west WA in April and remains until October (Marchant and Higgins 1990). The two species that may not have been around during the surveys, Rainbow Bee-eater and Cattle Egret, are both common and widespread species in Australia.

4.1 (f) Nuclear actions

NA

4.1 (g) Commonwealth marine areas

NA

4.2 Important or unique aspects of the environment, if relevant

4.2 (a) Soil and vegetation characteristics

The majority of the site lies on well drained, low fertility sandy soil. Most of the site has been cleared of native vegetation for agricultural purposes. Native vegetation now occurs in isolated patches on the proposed wind farm site or as continuous habitat links along wide road reservations.

A detailed survey of native vegetation extent and quality has been undertaken of the project area (see Attachment 1 – report by Brett Lane & Associates Pty Ltd 2007). The vegetation quality across the area varies depending on the size, condition, historical and present land uses in and near vegetation remnants.

Three different vegetation types occur within the project area: Kwongan Heathland, Grassy Woodland and exotic vegetation, with exotic vegetation dominating.

The Kwongan Heathland is the most common vegetation type in the region. It occurs across the site in various areas along ridges, in sandy fenced off areas and along roadside verges. This vegetation type is predominantly made up of heathland species that thrive in low fertile soils. Some of the dominant species include: *Banksia sphaerocarpa, Dryandra stenoprion, Grevillia amplexicaulis, Hakea trifurcate* and *Xanthorrhoea preisii.* Weed invasion were generally low in these areas.

Grassy Woodland vegetation type was present across the site often occurred along drainage lines and on hillsides. The woodlands were dominated by eucalypts including: River Red Gum (*Eucalyptus camaldulensis*), Marri (*Eucalyptus calophylla*) or Blackbutt (*Eucalyptus patens*). The woodland areas generally had a grassy understorey that was dominated by exotic grass species.
Exotic and disturbed vegetation covered the remaining portions of the project area. This category included exotic grasslands, hedges planted for feed for stock and landscape plantings. Exotic species observed included: Cape Weed (*Arctotheca calendula*), Stinkwort (*Dittrichia graveolens*), Patterson's Curse (*Echium plantagineum*), Barley Grass (*Hordeum geniculatum*), Lupin (*Lupinus cosentinii*) and Subterranian Clover (*Trifolium* sp.). Planted native (i.e. non-indigenous) species have been used across the site for wind breaks and some speceis of shrub and tree (e.g. Tree Lucern *Chamaecytisus palmensis*) have been sown in dense plantations for stock feed. Eucalypts and pines were the most common trees planted at the site.

The plant list for the site, based on the autumn survey, comprised of a total of 57 species including 52 (91%) indigenous and 6 (9%) exotic species.

Areas of significant native remnant vegetation will not be affected by the proposed wind farm.

4.2 (b) Water flows, including rivers, creeks and impoundments

Water courses throughout the site are seasonally dry. Most are made up of small drainage lines running down the sides of hills. Hill River borders part of the western and northern boundaries of the proposed wind farm site. Many small farm dams have been constructed throughout the site for watering stock.

4.2 (c) Outstanding natural features, including caves

NA

4.2 (d) Gradient

The proposed wind farm low, rolling hills and valleys. The peaks of the ridges were between 190 - 315 m above sea level.

4.2 (e) Buildings or other infrastructure

Farm houses, sheds and water tanks are located in various parts of the site.

4.2 (f) Marine areas

NA

4.2 (g) Kinds of fauna

Many varieties of fauna are associated with the site. The majority of the species found at the site are common species associated with heathland, woodland or farmland. Based on the field assessment and the review of existing information, the site is known or likely to support 143 species of fauna, including 16 species of mammals (3 introduced), 105 species of birds (1 introduced), 15 species of reptile and 7 species of frog. These species are listed with their scientific names in the flora and fauna assessment report (Brett Lane and Associates Pty Ltd 2007 - Appendix 1), which also records those found during the field assessment and bird utilization survey. Only one nationally threatened species is considered to occur regularly at the site: the Carnaby's Cockatoo (see account in Section 3 of this Form).

4.2 (h) Current state of the environment

The subject land is privately owned. The majority of the land has been cleared of native vegetation and is currently being used for grazing sheep and cattle. The land is dominated by exotic grass species or fodder plantations. There were signs of soil erosion throughout most of the gullies and down some of the hillsides. Foxes and Rabbits inhabit parts of the site.

4.2 (i) Commonwealth Heritage Places and places on the Register of the National Estate

NA

4.2 (j) Known Indigenous heritage values

None known

4.2 (k) Other important or unique values of the environment

The site borders with the Badgingarra National Park. This national park is a Kwongan Heathland community and has a high diversity of flora and fauna species.

4.2 (l) Tenure of the action area (eg freehold, leasehold)

Freehold, with local roads traversing various parts of the site.

4.2 (m) Existing land uses

Agricultural.

4.2 (n) Proposed land uses

Wind farm and continued agricultural.

5 Nature and extent of likely impacts

5.1 Likely impacts on matters of national environmental significance (NES)

5.1 (a) Likely impact on the world heritage values of a declared World Heritage property
NA

5.1 (b) Likely impact on the heritage values of a listed National Heritage place
NA

5.1 (c) Likely impact on the ecological character of a declared Ramsar wetland
NA

5.1 (d) Likely impact on the members of a listed threatened species or ecological community, or their habitat

The proposed wind farm has the potential to impact on the nationally endangered Carnaby's Cockatoo through a combination of one or both of:

- Collision with operating wind turbines while flying through the site; and
- Indirect disturbance from the proposed wind farm, preventing access to foraging habitat.

These potential impacts are explored further in the attached detailed technical report prepared for the project (Brett Lane & Associates 2007). The probability of significant impacts arising from these two effects are summarised below.

Collision Risk

The cockatoos were seen in many parts of the site and their preferred habitat is Kwongan Heathland, planted trees and woodlands. During the bird utilisation survey at the site, the Carnaby's Black-Cockatoo was recorded once from observation points, which were located where turbines are proposed to be sited. The cockatoos were regularly observed feeding in remnant heathland in paddocks and along roadside verges. They were not seen flying above tree height (10 metres) and generally preferred to fly low in the more sheltered parts of the site, between ridges and along gullies. No foraging habitat exists near most of the turbine locations in the proposed wind farm, with exotic pasture grass dominating the landscape in these localities.

The observations during site studies of the behaviour, habitat choice and movements of the Carnaby's Black-Cockatoo suggest strongly that it utilises the site in a particular way, generally avoiding the higher parts of the landscape that lack habitat, where most wind turbines are proposed to be located.

Also of relevance is that during the current site investigations, a detailed mortality monitoring program was underway at the nearby Emu Downs Wind Farm (within 5 km of the site and south of Bibby Road). Monitoring had commenced in late January 2007 and was completed at the end of April 2007. This included detailed searches under operating wind turbines for collision-related fatalities. No cockatoo fatalities were recorded, despite significant numbers occurring in the region at the time. In addition, Carnaby's Black-Cockatoos were observed in a number of nearby

locations but very few were observed within the operating wind farm, suggesting significant avoidance of collision with turbines.

Of further interest in this assessment is the observation at the Toora Wind Farm in Victoria that the closely related and behaviourally similar Yellow-tailed Black Cockatoo (*C. funereus*) occurred regularly on the site before the wind farm was constructed but avoided the site after the wind farm commenced operations. If the Carnaby's Black-Cockatoo reacts in the same way then avoidance of wind turbines is a significant factor reducing the likelihood of collision risk. The low number of observations of the species within the existing Emu Downs Wind Farm suggest that avoidance is likely. This, combined with the low occurrence during bird utilisation surveys at turbine sites on the Badgingarra site itself, and the observed patterns of site usage there, indicate that regular collision-related mortality of the species at Badgingarra is highly unlikely.

Disturbance Effects

A map showing the location of potential Carnaby's Black-Cockatoo habitat in relation to the wind farm site is attached (titled: *Potential Impact on the Carnaby's Cockatoo Habitat*). This shows that no native vegetation will be removed as a consequence of the proposed wind farm and that turbines and access tracks are capable of being located in agricultural areas.

A further investigation (Level Two risk assessment) was undertaken to examine how the cockatoos were behaving around the existing wind farm (the Emu Downs Wind Farm, south of Bibby Road). The results of this investigation showed that few cockatoos occurred within the wind farm but that within 1 km of the wind farm, habitats were more regularly used. This indicates that the species avoided noticeably the existing wind farm but regularly fed within 500m to 1 km of turbines. This suggests that the indirect, disturbance effect of the wind farm may extend in the order of this distance, and that a small proportion of the available habitat on the Badgingarra site would be excluded from use by the species as a consequence of disturbance by the proposed wind farm.
The area of habitat loss arising from the disturbance effect of operating wind turbines has been estimated. This has been estimated in three ways, each of which may be realistic in view of the observed avoidance by cockatoos of wind turbines:

- A - the area of habitat within 500m of each turbine;
- B - the area of habitat lying within a line connecting the edges of the areas within 500m of each turbine in the two main groups of turbines (east and west); and
- C - the area of habitat within a line around the entire wind farm out to 500m from the turbines.

This assessment has been done for the 'worst case' 65 turbine option. These areas are shown in the attached Map - *Potential Impact on the Carnaby's Cockatoo Habitat* (reproduction of Figure 8 of Brett Lane & Associates, 2007)) and the total area and proportion of the habitats present on the wind farm site likely to be affected in this way are summarised in Table 15 of Brett Lane & Associates (2007). Less habitat would be affected by the 43 turbine option. The results of this analysis show that between 400 and 1,100 ha of potential cockatoo habitat might be excluded from usage by the species as a consequence of the disturbance effect of the proposed wind farm.

Cockatoo Habitat	Area of existing Habitat (ha)	Area (A) within 500m buffer (ha)	Percent Affected by A	Area (B) within two envelopes	Percent Affected by B	Area within (C) large envelope	Percent Affected by C
Woodland	1,242.60	0	0	0.55	0.04	162.49	13.08
Kwongan Heathland	1,804.93	394.04	21.8	588.89	32.63	786.6	43.58
Pines	28.59	0	0	3.21	11.24	14.65	51.24
Planted Eucalypts	163.77	28.02	17.1	60.54	36.97	124.27	75.88
Total	3,239.88	422.05	13	653.20	20.16	1088.01	33.58

It is estimated that more than 10,000 ha of suitable habitat for the species occurs within 10 km of the proposed wind farm (including the Badgingarra National Park). In addition, significant protected areas, totalling over 44,000 hectares, occur within 40 km of the wind farm site that support significant areas of suitable habitat, including:

- Badgingarra National Park: 13,108 ha;
- Coomallo Nature Reserve: 8,807 ha;
- Southern Beekeepers Nature Reserve: 10,808 ha;
- Nambung National Park: 8,362 ha;
- Hill River Nature Reserve: 882 ha; and
- Un-named Conservation Park: 2,369 ha.

Therefore, the total area of habitat potentially excluded from access by the cockatoo as a consequence of indirect effects is a very small proportion of that available within the region. Observations of bird movements on the site during the general bird utilisation survey and during the targeted investigation, indicate that few cross the site in any numbers. Habitats for roosting and foraging differ, with the woodland being used for roosting and the Kwongan heathland being use for foraging. The largest areas of woodland on the site lie near the northern and southern edges of the wind farm envelopes assessed (particularly in the western part of the site. Flight paths from these areas to the Badgingarra National Park to the east and extensive habitats to the west towards Cervantes (e.g. Southern Beekeepers Nature Reserve, would lie mostly north or south of the wind farm envelopes. This suggests that significant disruption to movements between the most prospective roosting habitats on the site and the largest areas of foraging habitat will not occur.

The wider, regional population of the Carnaby's Black-Cockatoo moves across a much larger area than the proposed wind farm site and individuals are unlikely to be prevented from moving between major habitat areas in the region as a consequence of the wind farm once it is operating.

5.1 (e) Likely impact on the members of a listed migratory species or their habitat

Due to the low utilisation rate of these birds at the proposed wind farm site and the low number of records of them nearby, the risks to listed migratory species that may occur in the area are considered low. The low number of records of these species probably reflects ia low level of usage

of this part of their range. This low level of usage translates into a low probability of collision with operating wind turbines.

5.1 (f) Likely impact on the environment in part of the Commonwealth marine area
NA

5.2 Likely impacts for nuclear actions, actions affecting Commonwealth land or actions taken by the Commonwealth

N/A

6 Measures to avoid or reduce impacts

The following measures will be taken to ensure that impacts on the environment, and in particular the flora and fauna, of the proposed wind farm site are avoided:

- No patches of native vegetation will be removed for turbine, access track, underground power cable or sub-station construction; and
- All works and activities will be confined to clearly designated areas where the site is dominated by exotic grassland used for grazing domestic stock.

In this way, the direct removal of potential Carnaby's Black-Cockatoo habitat will be avoided.

7 Conclusion on the likelihood of significant impacts

NOTE: Under the EPBC Act, you must identify in the referral whether or not you believe significant impacts on the matters protected under the Act are likely. If you identify that significant impacts are likely, you must identify the relevant protected matters in section 7.2.

Do you THINK your proposed action is likely to have significant impacts?

X	No, complete section 7.1
	Yes, complete Section 7.2

7.1 Proposed action is NOT LIKELY to have significant impacts

Key reasons

Although the Carnaby's Black-Cockatoo was recorded in the region, detailed investigations of its use of habitats in the region, and of its response to an existing wind farm strongly support the view that regular collision of the species with operating wind turbines has a low probability.

Furthermore, the observation of cockatoos using habitats within 500m to 1 km of existing operating turbines (but generally not closer or among turbines) suggests strongly that indirect, disturbance effects are limited to a very small proportion (c. 420 ha) of the available habitat for this species in the region (estimated at over 3,000 ha within the site and over 44,000 ha within 40 km of the site). For this reason, significant indirect impacts from the proposed wind farm are considered to have a low probability.

The combination of a low probability of collision and limited indirect habitat effects make it highly unlikely that the proposed wind farm will have a significant impact on the regional (and wider) Carnaby's Black-Cockatoo population.

7.2 Proposed action is LIKELY to have significant impacts

Matters likely to be impacted

	sections 12 and 15A (World Heritage)
	sections 15B and 15C (National Heritage places)
	sections 16 and 17B (Wetlands of international importance)
	sections 18 and 18A (Listed threatened species and communities)
	sections 20 and 20A (Listed migratory species)
	sections 21 and 22A (Protection of the environment from nuclear actions)
	sections 23 and 24A (Marine environment)
	sections 26 and 27A (Protection of the environment from actions involving Commonwealth land)
	section 28 (Protection of the environment from Commonwealth actions)

Key reasons

8 Assessment approach under the EPBC Act

NOTE: If a decision is made that a proposal needs approval under the Act, the Minister will also decide the assessment approach needed to satisfy the objectives of the Act. While the information

you have provided in this referral will be taken into account in making this decision, the final decision rests with the Minister.

Level of assessment

	Bilateral Agreement applies
	Accredited assessment
	Assessment on referral information
	Preliminary information
	Public Environment Report
	Environmental Impact Statement
	Commission of Inquiry
	No comment/Not sure

Key reasons

9 Environmental history of the responsible party

NOTE: The EPBC Act Regulations provide for the environmental history of the party proposing to take the action to be taken into account when deciding the assessment approach for actions that need approval under the Act.

		Yes	No
9.1	Does the party taking the action have a satisfactory record of responsible environmental management. • If Yes, provide details The Energy Division of the Griffin Group is committed to a sustainable future for its business through significant investment in research and new technology, renewable energy projects and local environmental initiatives. Griffin has and will continue to participate in the following environmental initiatives: • Undertaking research into new clean coal technology and other technologies which reduce Greenhouse Gas Emissions; • The establishment of the sustainable energy projects such as the Emu Downs Wind Farm; • Ground level involvement in local environmental initiatives including the Collie River Salinity Recovery Project to return the Wellington Dam to a potable water supply for Western Australia; • Use of the best applicable technology for new projects; • Investigating options to offset greenhouse gas emissions; and • Contributing to the communities we operate in through employment, education and training, community partnerships and community capacity building initiatives. Stanwell Corporation Limited is a leading Australian generator of environmentally responsible electricity, with a diverse portfolio of generating assets and projects under development. Since its inception in 1997, Stanwell has developed an extensive portfolio of coal-fired, gas, wind, and hydro power generation facilities. Stanwell was formed from the restructure of the internationally recognised Queensland electricity supply industry as the State prepared for the introduction of the National Electricity Market. Stanwell is committed to providing low cost, reliable electricity and to leading the market in asset and environmental performance, while pursuing a balanced portfolio that gains strength from investment in diverse energy technologies. Stanwell has generating assets and projects located in Queensland, New South Wales, Victoria and Western Australia. The most significant presence is in Queensland where Stanwell contributes nearly 20% of the electricity generated in the State. Stanwell is committed to continually improving the environmental performance of at all its production sites through its on going certification to the international standard for Environmental Management Systems (ISO14001). Stanwell is also a signatory to the Energy Supply Association of Australia's Code for Environmental Practice. Stanwell is one of the few electricity generators in Australia with a dedicated renewable energy	Yes	

portfolio. Barron Gorge and Kareeya Hydro, Windy Hill Wind Farm, Toora Wind Farm, Koombooloomba Hydro, and Wivenhoe Small Hydro are accredited under the Federal Government's Renewable Energy (Electricity) Act 2000. Windy Hill and Koombooloomba were the first renewable power stations in Australia to be accredited under this Act. Stanwell's renewable energy projects also have accreditation from the National Green Power Accreditation Scheme.

The Emu Downs Wind Farm Project, in Western Australia, was a finalist in the 2006 WA Environment Awards in the category of *Corporate Business Leading by Example*.
It should be noted that Stanwell's hydro-electric stations at Barron Gorge and Kareeya, including Koombooloomba Hydro, operate in a World Heritage Area and have demonstrated a high level of environmental performance.

Stanwell Corporation Limited is a signatory to the Generator Efficiency Standards, a program run through the Australian Greenhouse Office which obligates (non binding) Stanwell Power Station to maintain efficiency performance relative to plant age. This initiative has seen the assessment and implementation of suitable projects to improve station efficiency and reduce emissions.

Stanwell is a member of the Co-operative Research Centre for Greenhouse Gas Technologies, and Queensland Centre for Clean Energy, reflecting our commitment to the research and development of advanced clean coal technologies. Stanwell is also a sponsoring member of the Australian Business Council for Sustainable Energy (refer http://www.bcse.org.au).

Stanwell has active commitment to the environment and regional communities in which it works. With a geographically widespread and technologically diverse portfolio of energy projects, the company continues to achieve a substantial positive economic impact in regional Australia through the creation of job opportunities and the procurement of local resources.

All Stanwell operational sites and projects under development actively incorporate community consultation programs. Stanwell continues to support regional communities through a sponsorship program dedicated to stimulating regional development, providing financial and in-kind assistance to local community organisations and charities, and initiating educative opportunities for young people.
In 2001, the organisation received the prestigious Banksia Award for Corporate Environmental Leadership and was a finalist for the Award in 2002.
Stanwell Corporation has been recognised both nationally and internationally for its Operation and Maintenance of Thermal Power Stations and for Environmental Management.

Awards received highlighting Stanwell's ability include:

- Award for National Engineering Excellence in 1996 - The Institution of Engineers.
- Power Plant Award – McGraw Hill Electric Power International – New York.
- Special Commendation – Construction Industry Development Association.
- Exemplary Model for Training in Industrial Technology – Asia Pacific

	Economic Co-operation. • Two Banksia awards for Environmental Leadership and Performance • Recognition by World Wide Fund for Nature with its Energy. Performance Index as one of Australia's top two major fossil fuel power producers. In 2002/03 the World Wide Fund for Nature ranked Stanwell one of Australia's best two major fossil fuel power companies. This WWF Energy Performance Index considered generators renewable energy investments and the greenhouse efficiency of power stations.		
9.2	Is the party taking the action subject to any proceedings under a Commonwealth, State or Territory law for the protection of the environment or the conservation and sustainable use of natural resources? • If Yes, provide details		No
9.3	For an action for which a person has applied for a permit under the EPBC Act, is the person making the application subject to any proceedings under a Commonwealth, State or Territory law for the protection of the environment or the conservation and sustainable use of natural resources? • If Yes, provide details		No
9.4	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? • If Yes, provide details of environmental policy and planning framework	Yes	

Griffin Windfarm II Pty Ltd is part of the Energy Division of the Griffin Group of Companies and the action will be within the Environmental Policy of the Energy Division of the Griffin Group. Griffin's approach to environmental responsibility and sustainable development is incorporated in our Environmental Policy. Key principles of the Environmental Policy include:

- Promote environmental awareness to all employees and strive for continuous improvement in reducing the impacts of its operations on the environment.
- Comply with all laws, regulations and standards deemed applicable
- Ensure we have appropriate management systems to identify, evaluate and mitigate the environmental impacts of our operations
- Undertake research to resolve specific environmental problems
- Maintain open dialogue with government and community regarding environmental performance and plans
- Review the outcomes from environmental audits with the view to assessing and implementing alternate strategies into our business, which are both environmentally and commercially responsible.

A copy of Stanwell's Policy is attached. Stanwell is committed to improving the environmental performance of our operational activities by reducing emissions, water and energy consumption and waste generation, and by improving recycling, cultural heritage and land management practices.

Stanwell aims to cooperatively work with community, industry and government to achieve excellence in all areas of environmental management. Stanwell is guided by an Environmental Policy and embraces environmental management principles by maintaining certification to ISO14001:2004.

10 Information sources and attachments

10.1 References

Brett Lane and Associates Pty Ltd 2007. *Proposed Badgingarra Wind Farm flora and fauna assessment and bird utilisation survey,* Report No. 7044 (1.5) to Enthalpy Pty Ltd

Cale, B. 2003. *Carnaby's Black-Cockatoo (*Calyptorhynchus latirostris*) Recovery Plan 2002-2012.* Department of Conservation and Land Management, Western Australian Threatened Species and Communities Unit, Wanneroo.

DEWR 2007. *EPBC Act Protected Matters Search Tool.* http://www.deh.gov.au/erin/ert/epbc/imap/map.html. Australian Government, Department of the Environment and Water Resources (formerly Department of the Environment and Heritage), Canberra.

Garnett, S.T. and Crowley, G.M. 2000. *The Action Plan for Australian Birds*. Environment Australia, Canberra.

Higgins, P.J. (Ed.) 1999. *Handbook of Australian, New Zealand and Antarctic Birds: Volume 4 Parrots to Dollarbirds*, Oxford University Press, Melbourne.

Johnstone, R.E. and Storr, G.M. 1998. *Handbook of Western Australian Birds, Volume I, Non-passerines (Emu to Dollarbird)*. Western Australian Museum, Perth.

Marchant, S. and Higgins, P.J. (eds) 1990. *Handbook of Australian, New Zealand and Antarctic Birds, Vol. 1*. Oxford University Press, Melbourne.

Menkorst, P. and Knight, F. 2001. *A Field Guide to the Mammals of Australia*. Oxford University Press, Melbourne.

Saunders, D.A. 1975. Subspeciation in the White-tailed Black Cockatoo, *Calyptorhynchus baudinii*, in Western Australia. *Australian Wildlife Research* 1: 55-69.

Saunders, D. and Ingram, J. 1995. *Birds of Southwestern Australia: An Atlas of Changes in the Distribution and Abundance of Wheatbelt Avifauna*. Surrey Beatty & Sons, Chipping Norton.

WATSSC 2003, *Threatened Fauna Ranking*, endorsed by WA Threatened Species Scientific Committee.

10.2 Reliability of information

Refer attached report *Proposed Badgingarra Wind Farm: Flora and Fauna Assessment and Bird Utilisation Survey* (Brett Lane & Associates, 2007) for information on limitations and testing for representativeness of the survey.

10.3 Attachments

You must attach	figures, maps or aerial photographs showing the project locality (section 2)	Refer attached Locality Map and Preliminary Layouts Map
	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 4)	

If relevant, attach	copies of any state or local government approvals and consent conditions (section 3.4)	
	copies of any completed assessments to meet state or local government approvals and outcomes of public consultations, if available (section 3.5)	
	copies of any flora and fauna investigations and surveys (section 4)	Refer attached report: Proposed Badgingarra Wind Farm: Flora and Fauna Assessment and Bird Utilisation Survey (Brett Lane & Associates, 2007)
	technical reports relevant to the assessment of impacts on protected matters and that support the arguments and conclusions in the referral (section 4 and 5)	
	report(s) on any public consultations undertaken, including with Indigenous Stakeholders (section 4)	

11 Signatures and declarations

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

Project title

11.1 **Party who prepared the referral**

I declare that the information contained in this form is, to my knowledge, true and not misleading. I request that the person named in 11.3 below (if any) be designated as the proponent for the action.

Signature Bruce Mitchell

Date 2 July 2007

Full name BRUCE MITCHELL. (ENTHALPY PTY LTD)

11.2 **Party who is responsible for action**

I declare that the information contained in this form is, to my knowledge, true and not misleading.

Derek Hannigan Signature

3/7/07 Date 2/7/07

Derek Hannigan Stanwell Full name Wayne R. Trimble (Griffin Windfarm II Pty Ltd)

11.3 **Proponent (complete only if different from 11.2)**

I, being the person nominated in Section 1.3 of this referral form as the nominated proponent (or agent acting on behalf of), agree to be designated as the proponent for the action described above if it is decided that the action requires approval under Part 9 of the EPBC Act.

Signature

Date

Full Name

If the referring party is a small business (fewer than 20 employees), estimate the time, in hours and minutes, to complete this form (include your time reading the instructions, working on the questions and obtaining the information and time spent by all employees in collecting and providing this information).

Hours	Minutes
40	

(excluding investigations)