



**Environment,
Climate Change
& Water**

Your reference:
Our reference:
Contact:

MP10_0135
FIL10/14579, DOC10/52336
Mathew Makeham, 6992 7002

#8

Dinuka McKenzie
Infrastructure Projects
Department of Planning
GPO Box 39
Sydney NSW 2001

Dear Ms McKenzie

**RE: Draft Environmental Assessment for Proposed Capital Wind Farm II (MP 10_0135) – Part
3A Environmental Planning & Assessment Act 1979**

I refer to your letter dated 9 December 2010 inviting the Department of Environment, Climate Change and Water (DECCW) requesting to provide a submission on the Environmental Assessment (EA) prepared for the abovementioned project.

DECCW has completed a review of the EA and raises the following issues.

1. DECCW does not believe the publicly exhibited EA, and associated draft Statement of Commitments, contains enough information to consider the Project in terms of impacts and mitigation measures in relation to Aboriginal heritage values; and
2. Insufficient information has been provided in order to allow DECCW to fully determine the nature and extent of the potential impacts of the project on the biodiversity present onsite.
3. The current development proposal is unable to meet an "improve or maintain" biodiversity outcome.

See Attachment 1 to this correspondence which contains DECCW 's detailed comments on the project.

DECCW is happy to discuss these comments further with the Department of Planning and the proponent, including any on site meeting. If you have any queries about this matter please contact Mathew Makeham or myself on (02) 6229 7002.

Yours sincerely,

Sandra Jones 7/2/11

SANDRA JONES
Unit Head, South East Region
Environment Protection and Regulation Group

Attachment 1.

Comments on the Environmental Assessment for Capital Windfarm II

The following issues relate to the Aboriginal cultural heritage and Biodiversity issues connected to the proposed major project.

Aboriginal Cultural Heritage

DECCW has conducted a review of the Aboriginal cultural heritage information contained within the Environmental Assessment for the Capital II Wind Farm and the Aboriginal Archaeological & Cultural Heritage Assessment Report prepared by Austral Archaeology (dated November 2010) and provides the following comments and recommendations:

Following the DGRs the EA must include an assessment of the potential impact of the project components on indigenous heritage values (archaeological and cultural).

1. DECCW is concerned that the Aboriginal Archaeological & Cultural Heritage Assessment Report does not provide an adequate review of previous archaeological work within the surrounding area. A search of the DECCW Aboriginal Heritage Information Management System (AHIMS) indicates that there are a number of additional archaeological reports adjacent to or within close proximity to the Capital II Wind Farm study areas that should be reviewed in order to complete and fully inform the Aboriginal Cultural Heritage assessment.

These additional archaeological reports include:

- Cultural Heritage Management Australia 2008 An archaeological assessment of Lot 32, DP634213, Grantham Park, NSW. A report to Grantham Park Pty Ltd.
- Cultural Heritage Management Australia 2009 Sub-surface investigations at Lot 32, DP634213, Grantham Park, NSW. A report to Grantham Park Pty Ltd.
- Lance, A. 2009 An archaeological assessment of the Currandooley Lease, Bungendore, New South Wales. A report to Canberra Sand and Gravel.
- Packard, P. 1992 Archaeological investigation of proposed Sand Quarry Extension Lot 31 Portion 8, Parish Currandooley, near SE Lake George, NSW. A report to Canberra Sand and Gravel Pty Ltd and Coffey Partners International.
- Saunders, P. 2005 Proposed Subdivision, Lot 4 DP 583957, 'Petworth Park', Bungendore NSW, Archaeological Assessment. A report to Bill Swan and Associates.
- Williams, D. 2006 Stage 2 Archaeological Investigation at Headquarters Joint Operations Command, between Queanbeyan and Bungendore, NSW: Sub Surface Probing (DEC Permit #2422). A report to URS and Commonwealth Department of Defence.
- Williams, D. 2008 Stage 3 Archaeological Investigation at Headquarters Joint Operation Command, between Queanbeyan and Bungendore, NSW: Salvage of Indigenous Archaeology (Volumes 1, 2 & 3). A report to URS and Commonwealth Department of Defence.

Action: DECCW recommends that additional archaeological background assessment be undertaken to provide a complete assessment of Aboriginal Heritage values within the Project area and to consider the cumulative impact on cultural heritage within the broader region.

2. Recommendation 1, under Section 10 of the Aboriginal Archaeological & Cultural Heritage Assessment Report, states consideration should be given to repositioning wind turbines to avoid sites. In order to understand the potential impacts of the Project on Aboriginal

Heritage values the proponent should clearly identify the Aboriginal site locations and survey transects undertaken in relation to the proposed development design. If wind turbines are to be repositioned into areas that were not covered during the 2010 survey transects these areas should be surveyed to confirm whether they contain Aboriginal objects.

There is no detailed discussion within the EA or Aboriginal Archaeological & Cultural Heritage Assessment Report regarding the infrastructure associated with the Project, such as underground cabling, electrical substation and transmission line linking wind farm to the grid, temporary concrete batching plant(s), construction compounds, obstacle lighting and any planned soil and erosion control or landscaping measures in relation to impacts on Aboriginal Heritage values. Avoidance or mitigation measures should be considered for all associated infrastructure as well such as access roads, transmission lines and wind turbines etc.

Action: DECCW recommends that if wind turbines are to be repositioned into areas that were not covered during the original survey transects then a supplementary Aboriginal heritage assessment of these additional areas should be undertaken and management recommendations prepared in consultation with Aboriginal stakeholders.

Action: If Aboriginal objects are to be salvaged and relocated, where repositioning of development activities cannot be achieved, then a new DECCW Aboriginal site impact recording form should be submitted to DECCW to update the previous site recordings on AHIMS – see link to DECCW website:

<http://www.environment.nsw.gov.au/resources/cultureheritage/101022asirf.pdf>

Consideration should be given to relocating Aboriginal objects into areas that are not expected to be impacted in the future.

3. Recommendation 2, under Section 10 of the Aboriginal Archaeological & Cultural Heritage Assessment Report, states test excavation and salvage of potential archaeological deposits should be undertaken to clarify their potential prior to construction proceeding in these areas. DECCW recommends that test excavation should occur prior to any proposed salvage. Following the outcomes of the test excavations any proposed management and/ or mitigation strategies should be undertaken in consultation with Aboriginal stakeholder groups. Salvage should be undertaken only as a mitigation measure if required, subsequent to the results of the test excavation.

4. The survey results in Table 8.5 (page 54- 56 of the Aboriginal Archaeological & Cultural Heritage Assessment Report) identifies the Aboriginal sites CWF2-PAD-01 and CWF2-PAD-02 as having high archaeological potential, with CWF2-S-14 having medium potential. An assessment of research potential in Table 9 (page 59-60) states that sites CWF2-S-04, CWF2-S-06, CWF2-IF-07, CWF2-IF-10, CWF2-S-14, CWF2-IF-20 all have moderate research potential, with sites CWF2-PAD-01 and CWF2-PAD-02 having high research potential. There is no satisfactory discussion within the Aboriginal Archaeological & Cultural Heritage Assessment Report regarding the assessment of those sites considered as having moderate potential in relation to the management recommendations. Specifically there is no correlation with the conclusion in Section 10.1 (page 62) which states 61 of the sites, therefore all sites other than the 2 PADs, have low archaeological potential.

Action: The proponent should provide further clarification regarding the archaeological potential of the Aboriginal sites CWF2-S-04, CWF2-S-06, CWF2-IF-07, CWF2-IF-10, CWF2-S-14, CWF2-IF-20.

5. DECCW is concerned that the exhibited EA does not provide any statement of commitments for Aboriginal heritage values although it is identified as a key issue to address in the EA and the Aboriginal Archaeological & Cultural Heritage Assessment report recommends adherence to an Aboriginal Cultural Heritage Management Sub Plan prepared by Austral Archaeology in 2007.

The draft Statement of Commitments should include a commitment to the development and implementation of an Aboriginal Heritage Management Plan (AHMP) as part of the management of Aboriginal heritage values. At a minimum, an AHMP should:

- describe the procedures of how the recorded Aboriginal sites will be managed during the life of the development Project, including measures to protect sites through fencing and signage as well as proposed mitigation measures of test excavations and salvage/ collection activities;
- describe the procedures that would be implemented if any additional heritage or archaeological sites were discovered during the development; and
- describe a contingency plan and reporting procedure should damage to Aboriginal objects or sites occur at the development.

Action: DECCW recommends that the draft Statement of Commitments be revised to include a commitment to the development and implementation of an Aboriginal Heritage Management Plan. This should be undertaken in consultation with the Aboriginal Stakeholders.

6. The Aboriginal site CWF2-IF-10 is not listed in the Recommendations section of the Aboriginal Archaeological & Cultural Heritage Assessment report for any management.

The DGRs require that the EA must demonstrate effective consultation with Indigenous stakeholders during the assessment and in developing mitigation options including the final recommended measures.

7. Whilst it appears from the comments provided in the correspondence from the Buru Ngunawal Aboriginal Corporation (BNAC), attached as Appendix B to the final Aboriginal Archaeological & Cultural Heritage Assessment Report, that some of the recommendations from the draft report no longer occur within the final report, it is unclear as to whether comments from the BNAC have been incorporated into the final report.

Specifically BNAC have requested more detailed information to be provided about the exact wind turbine locations as well as the proximity of electrical cabling and access roads to each recorded Aboriginal site in order to ascertain what impacts will occur. Was this information provided? BNAC also requested that electrical cabling be included as part of the impact measures to be taken in to consideration. Has this occurred?

Action: The proponent should supply clarification as to how the comments from BNAC have been considered within the EA.

8. Point 4 of the BNAC comments relate to provisions of the *National Parks and Wildlife Act* for any additional unrecorded Aboriginal archaeological material that may be encountered during the development. This recommendation is no longer reflected within the EA or under Section 10.2 of the Aboriginal Archaeological & Cultural Heritage Assessment Report and there is no discussion in the EA or under Section 10.2 of the Aboriginal Archaeological & Cultural Heritage Assessment Report regarding the protocol for additional unrecorded Aboriginal objects being located during the course of the development activity.

Action: The EA should include a commitment to the development and implementation of an Aboriginal Heritage Management Plan that would describe the procedures that would be implemented if any additional heritage or archaeological sites were discovered during the development.

9. Under Point 6 of the BNAC comments, BNAC states they are in agreement with the recommendation of restricting access to Aboriginal archaeological information prior to public exhibition. Did this consultation occur?

Action: The proponent should supply clarification as to whether consultation occurred regarding data restriction and the outcomes of the consultation.

10. It is unclear as to whether BNAC have commented on the recommendation regarding adherence to the Cultural Heritage Management Sub Plan. Has a copy of this plan been provided to the Aboriginal stakeholders for comment? Where the Aboriginal stakeholders involved with the development of this plan?

Action: The proponent should supply clarification as to whether consultation occurred with Aboriginal stakeholders on the Cultural Heritage Management Sub Plan and the outcomes of any consultation.

Action: DECCW recommends that the draft Statement of Commitments be revised to include the Cultural Heritage Management Sub Plan as part of the Construction Environment Management Plan. This should be undertaken in consultation with the Aboriginal Stakeholders.

The EA must be consistent with the Guidelines for Aboriginal Cultural Impact Assessment and Community Consultation (DEC July 2005).

11. There are currently no corresponding Aboriginal sites listed on the DECCW Aboriginal Heritage Information Management (AHIMS) database for the 63 Aboriginal sites located during the June & July 2010 survey undertaken by Austral Archaeology. Nor has any updated site card information, as suggested under section 5.0 (page 23) of the Aboriginal Archaeological & Cultural Heritage Assessment Report, been received for the sites #57-2-0007 and #57-2-0060.

The input of site recording forms into AHIMS allows DECCW to adequately assess the cumulative archaeological resource of the area in relation to the development impact and other sites in the local area. Essential information is generally recorded on a site recording form, that is additional to information supplied within a survey report, and data from these site recordings will contribute to the body of knowledge about site distribution patterns associated with Aboriginal use of the Lake George/ Bungendore area.

This notification, as recommended under section 10.2 of the Aboriginal Archaeological & Cultural Heritage Assessment Report, is a requirement of the *Aboriginal Cultural Heritage Standards and Guidelines Kit* (NPWS 1997), which is required to be followed as part of the *Guidelines for Aboriginal Cultural Heritage Assessment and Community Consultation* (DEC July 2005), and is also required under Section 89A of the *National Parks and Wildlife Act 1974*.

It is noted that the 2nd paragraph on page 53 of the Aboriginal Archaeological & Cultural Heritage Assessment Report states that site cards to be submitted to AHIMS are provided in Appendix C, however this is not the case as Appendix C is a copy of the print out from an AHIMS Site Search.

Action: DECCW Aboriginal site recording forms are to be forwarded to DECCW for input into AHIMS prior to consent being granted for the project. A link to the site card is attached:

http://www.environment.nsw.gov.au/resources/parks/SiteCardMainV1_1.pdf

12. To date, DECCW has not received a copy of the final Aboriginal Archaeological & Cultural Heritage Assessment report for entry into the AHIMS report database and updating of the AHIMS Register as recommended under section 10.2 of the Aboriginal Archaeological & Cultural Heritage Assessment Report. This is a requirement of the NPWS *Aboriginal Cultural Heritage Standards and Guidelines Kit*, 1997, which is required to be followed as part of the *Guidelines for Aboriginal Cultural Heritage Assessment and Community Consultation* (DEC July 2005). Data from this report will contribute to the body of knowledge about Aboriginal site distribution patterns associated with Aboriginal use of the local area.

Action: A copy of the final Aboriginal Archaeological & Cultural Heritage Assessment Report is to be forwarded to DECCW for input into AHIMS prior to consent being granted for the project.

In assessing the EA and Aboriginal Heritage report supplied there are also a number of broader issues that DoP may need to consider in the overall assessment of the Project.

13. There is no indication as to whether Recommendation 4, under Section 10.2 of the Aboriginal Archaeological & Cultural Heritage Assessment Report, occurred prior to the public exhibition of the EA? Section 1.7 of the Aboriginal Archaeological & Cultural Heritage Assessment Report also states data restriction will be discussed with Aboriginal stakeholders prior to public exhibition.

It is noted that the location data of sites has not been removed from the exhibited report. **It is a requirement of a DECCW AHIMS search that Aboriginal site location information is not made available to the public and yet the AHIMS Search results are attached as Appendix C to the Aboriginal Archaeological & Cultural Heritage Assessment Report.**

Action: The proponent should supply clarification as to whether consultation occurred with Aboriginal stakeholders regarding data restriction and why the AHIMS Search results have been made available in a public exhibited report.

14. Table 2.2 in the Aboriginal Archaeological & Cultural Heritage Assessment Report outlines the applicability of State legislation to the Project. The *National Parks and Wildlife Act* was amended in July 2010 and new Aboriginal Cultural Heritage provisions commenced on 1st October 2010. Under these amendments, the requirement to notify DECCW of Aboriginal site information has been renumbered to section 89A.

Action: The proponent should note the relevant changes to the *National Parks and Wildlife Act* that commenced on 1st October 2010.

15. If there are any subsequent plans to transfer material to Aboriginal stakeholders as a result of proposed test excavations or salvage activities, then Section 85A of the *National Parks and Wildlife Act* is still applicable to Part 3A projects whereby any proposal to transfer ownership of Aboriginal objects to an Aboriginal community must be done so under a Care and Control Permit issued by DECCW. See link to the DECCW website for more information: <http://www.environment.nsw.gov.au/licences/CareAgreements.htm>

16. DECCW has not been provided with a copy of the Aboriginal Cultural Heritage Management Sub Plan (Austral Archaeology 2007) as referred to under Section 10.2 of the Aboriginal Archaeological & Cultural Heritage Assessment Report and therefore cannot provide comment regarding adequacy of any recommended protocols and procedures within this document in relation to Aboriginal Heritage values for the Capital II Wind Farm Project.

17. A copy of the Austral Archaeology 2009 Aboriginal Archaeological Excavation Report for the Capital Wind Farm, referred to under section 5.3.2 and referenced under section 11.0 in the Aboriginal Archaeological & Cultural Heritage Assessment Report, has not been submitted to DECCW for input into AHIMS; as such DECCW can not adequately provide assessment on the results of this report in relation to the current study and the proposed archaeological management recommendations.

The results of these excavations are essential in understanding:

- a) the significance of the Aboriginal heritage values;
- b) the nature of development impacts to the Aboriginal heritage values, specifically on the potential archaeological deposits recorded; and
- c) the cumulative impacts on the Aboriginal heritage values across the entire development/ project area.

Action: A copy of the Austral Archaeology 2009 Aboriginal Archaeological Excavation Report for the Capital Wind Farm should be forwarded to DECCW for input into AHIMS.

Biodiversity and Threatened Species

DECCW has reviewed the information provided against the NSW Department of Planning Draft Part 3A Threatened Species Assessment Guidelines and provides the following comments.

The proponent has not adequately addressed the impacts this project will have on threatened species, endangered ecological communities that have potential to occur on the subject site.

DECCW note, flora and fauna surveys across the site were undertaken prior to the DGEARs being issued and without consultation with DECCW. While it is recognised the site is mostly cleared which reduces the potential for threatened species to occur. The site does contain suitable habitat for grassland flora and fauna species which must be surveyed during specific times and using specific methodologies to assume with confidence species presence/absence. The survey effort performed for this project is inconsistent with those supported by DECCW for a number of reptile and flora species which may occur on site.

The field component of the Flora and Fauna assessment included 2 days survey in May and 2 days in April, 2010. The report relies on previous surveys undertaken in the area to perform the environmental assessment, however the details of these surveys, such as survey methodology and effort are not included in the EA. DECCW can only perform a review of the EA based on the information provided.

A considerable overlap in survey methodologies is also noted by DECCW. While some overlap in survey methodology is appropriate on small highly disturbed sites, it is not recommended on projects of this magnitude as it significantly reduces the chance of species detection. The Flora and Fauna Assessment report does not clearly identify the level of survey undertaken for each survey methodology (people hours).

Reptiles

Little Whip Snake

Contrary to the habitat assessment in the flora and fauna report, DECCW considers the subject site does contain habitat for the Little Whip Snake. This species is known to occur within the locality of the subject site and therefore the proponent should assume the Little Whip Snake is present.

Pink-tailed Worm Lizard

Surveys for this species are considered inadequate as they were performed outside the optimal time for detection (from mid August to the end of October). DECCW recommend the proponent perform further targeted survey with optimal timing for this species.

Stripped Legless Lizard

The subject site has the attributes which this species requires. The species is known to occur within the CMA subregion in which the site is located. DECCW recommend the proponent assess the projects potential impact on this species.

DECCW acknowledges that the majority of impacts on fossorial or semi-fossorial reptiles will occur during the construction phase of the project. If the proponent will accept species presence within the development envelope, then the species could be addressed through suitable entries in the statement of commitments. DECCW would expect that such a statement would include a search of habitat immediately prior to clearing, management of open trenches with regular reptile recovery, a plan of what to do with any individuals recovered and protection of suitable habitat through a biodiversity offset.

DECCW suggest the assessment of impacts should be in line with the requirements to avoid, mitigate, and as a last resort offset areas of conservation value.

Flora

To increase the chance of detection targeted flora surveys should be performed during the flowering periods for each species. The flora surveys in the assessment have missed the flowering period for species listed in Table 1. DECCW considers the survey for the species in Table 1 is inadequate

Table 1

Species	Flowering Period
Austral Toadflax (<i>Thesium australe</i>)	Spring – Summer
Silky Swainson Pea (<i>Swainsona sericea</i>)	Early spring – December
Mountain Swainson Pea (<i>Swainsona recta</i>)	Early spring – December
Mauve burr daisy (<i>Calotis glandulosa</i>)	Spring – Summer

While it is recognised that grazing on the site may have decreased the potential for some species to occur. DECCW recommend surveys for the species listed above should be conducted during their flowering period especially during favourable seasons with high rainfall.

DECCW suggest the proponent perform a survey of the development footprint for the species listed above prior to construction. If detected during surveys the proponent must avoid impacts to these species.

Endangered Ecological Communities

The report identifies some areas of native grassland across the site would fit the definition of the state and federal listed Endangered Ecological Community (EEC), White Box Yellow Box Blakely's Red Gum Woodland derived grassland.

It also states, the site once supported Natural Temperate Grassland, which is also an EEC under the Environmental Protection & Biodiversity Conservation Act 1999, however this community has been obliterated across the site.

Section 5.4 of the report states construction activities will be micro sited to avoid impacting EECs. However the individual site assessment in 4.2 states towers, cabling and access tracks will be sited within native grassland. DECCW request the proponent clarify this point of difference. DECCW recommend the proponent avoid areas of high conservation such as EEC and threatened species habitat.

Biodiversity Offsets

The NSW Department of Planning Draft Part 3A Threatened Species Assessment Guidelines indicate in Step 4 the requirements for developments to avoid, mitigate, and as a last resort offset the impacts of the development on biodiversity values. The impacts from the proposed development are unable to meet an "improve or maintain" outcome.

The two NSW government endorsed tools (the PVP Developer and Biobanking Credit Calculator) used to assess an "improve" or "maintain" environmental outcome resulting from a development proposal suggest a 10:1 offset ratio is required for Yellow-Box woodland that is in low condition. Low-condition vegetation is where the native over-storey percentage of foliage cover is less than 25% of the lower value of over-storey percentage of foliage cover benchmark for that vegetation type, and less than 50% of ground cover vegetation is indigenous species, or more than 90% of ground cover vegetation is cleared. Vegetation that does not meet Low-condition is considered to be Moderate-Good.

Linked with the loss of EEC for this project is the requirement for appropriate offsets to support the principles of "maintain and improve". Offset areas are required to be managed for their conservation values in perpetuity. DECCW have provided this advice so the proponent can balance the cost of the wind farm options with the potential requirements for offsetting impacts. DECCW staff will be happy to review the appropriateness of any offset proposals that are developed.

Mapping

DECCW consider the mapping of EEC and high conservation values within the F&F assessment to be inadequate. DECCW request the proponent reproduce Figure 3 within the F&F assessment to an appropriate scale that clearly shows the development foot print and areas of grassland across the site. DECCW refer DoP to section 2 of the DGEARS.

DECCW recommend the EA should also include figures that clearly show the development footprint against the location of EEC and other high conservation values such as rock outcrops across the site.

Diurnal Bird Surveys

DECCW note the timing of diurnal bird observations, between 9:30 – 15:30 is outside peak activity periods for a number of species. DECCW advise DoP the survey is inconsistent with the *Threatened Biodiversity Survey and Assessment: Guidelines for Development and*

Activities 2004. Surveys should be undertaken during early morning and late afternoon for the best results on bird movements across the site.

DECCW recommend the full list of species recorded in the locality is taken into consideration for any future project redesign.

Lake George & Bird Strike Assessment

It is acknowledge that large water birds and raptors have a higher potential for blade strike then most agile flying species. While the recommendations in the Flora and Fauna report suggest large water bodies are not constructed within 1km of the site, the proposal will be within 200m of the high water mark for Lake George.

DECCW understand the lake rarely reaches capacity, however recent rain has seen significant fillings in some parts, especially on the Bungendore side. Currently there is an excellent opportunity to study bird movements to enable a bird strike assessment while the lake contains water.

DECCW request the proponent perform further bird surveys to assess bird activities during times when Lake George contains water. In doing so the proponent should consider any flight corridors that are potentially important locations for impact.