



Office of
Environment
& Heritage

Your reference: MP10_0202
Our reference: DOC12/45457; FIL12/10048
Contact: Peter Ewin; 03 5021 8915

Ms Felicity Greenway
A/Director – Infrastructure Projects
Department of Planning and Infrastructure
GPO Box 39
SYDNEY NSW 2001

Attn: Ms Kate Masters

Dear Ms Greenway

Re: Broken Hill Solar Plant - Major Project Application 10_0202

I refer to the above Major Project Application and accompanying Environmental Assessment ("EA") received by the Office of Environment and Heritage (OEH) on 26 October 2012.

We have reviewed the information provided and have determined that we are able to support the proposed solar plant, subject to the Department of Planning and Infrastructure (DP&I) seeking amendments to the draft Statement of Commitments outlined in Attachment 'A'.

Attachment 'B' contains our assessment of the proposal, including justification for the amendments that DP&I may wish to consider in its overall assessment of the application.

It should be noted that these amendments are important for our ongoing support of the proposal. It is expected that OEH will be given an opportunity to review the draft Director-General's Environmental Assessment Report for this proposal. If the amendments to the draft Statement of Commitments are not included to our satisfaction, we will be recommending that they are included as Conditions of Approval, if approval is recommended by DP&I.

Should you wish to discuss these matters further, please contact Peter Ewin on (03) 5021 8915 or by email at peter.ewin@environment.nsw.gov.au

Yours sincerely

M Sheehan 30.11.2012

MARK SHEAHAN
A/Manager Landscape and Aboriginal Heritage Protection (South)
Regional Operations Group

Enclosure: Attachments A and B

Attachment A

The following amendments to the draft Statement of Commitments (SoC) (Section 13 of the EA) are sought.

Flora and Fauna

We recommend that the following points should be added to the SoC under the heading of Biodiversity (after FF8);

- The Construction Environmental Management Plan should provide details on how clearing operations will be undertaken so as to minimise impacts on threatened fauna that may be present on the site.
- Monitoring of the raptor nest adjoining the proposal is required during operation, and if the nest site is abandoned then further mitigation measure will be required.
- The Offset Management Strategy must be developed in conjunction with OEH and must include information on how the offset achieves 'improve or maintain' outcome for biodiversity and include details on area, vegetation (communities and condition) and tenure (to be protected in perpetuity) of the offset. The Offset Management Plan must identify and fully cost management issues to be addressed, such as fencing, weed and feral animal control, and detail monitoring that is to be undertaken to determine the effectiveness of the management actions implemented.

Aboriginal Cultural Heritage

We recommend that the Statement of Commitments AH1 and AH3 under the heading of Aboriginal Heritage be modified, as follows.

IH1. OEH supports this commitment, and recommends that the Aboriginal Heritage Management Plan (AHMP) also be developed in consultation with OEH.

IH2. This draft commitment refers to the development of 'protocols' for the protection and management of unidentified Aboriginal objects or suspected human remains. These 'protocols' should be included in the AHMP referred to in draft commitment IH1.

EM1 and EM2. The Construction Environmental Management Plan (CEMP) should include details on the AHMP; the AHMP will need to be finalised and implemented prior to operation of the solar plant commencing.

Attachment B

Flora, fauna and threatened species

The Office of Environment and Heritage (OEH) has reviewed the sections of the *AGL Broken Hill Solar Plant Environmental Assessment* (EA) relating to flora and fauna for this proposal. We have had discussions with both the proponent (AGL Energy Limited) and the consultants that prepared the EA (Sinclair Knight Merz) and a number of changes to the draft EA have been incorporated. However, we believe that there are a number of shortcomings within the EA, though note that if the mitigation methods included within the Statement of Commitments (including those listed in Attachment 'A') are implemented, then the impacts on biodiversity, and particularly threatened species, will be minimised. The key points for consideration are:

General

- The EA identifies that the operating life of the project is approximately 30 years and identifies that changes to the vegetation present on the site are likely during construction and during operation. While it is recognised that there may be revegetation following the decommissioning of the plant it is unclear how this will be implemented and so OEH considers that the impact on vegetation should be considered permanent.
- OEH notes that the transmission line passes through Willyama Common, Crown Land managed by Broken Hill City Council. While a transmission line exists in the easement and the clearing of vegetation may be restricted to the location of power poles, we note that this is one of a number of projects that have involved clearing of the Willyama Common. We would consider that the agencies responsible for the management of the Common (Broken Hill City Council and the Department of Primary Industries, Catchments and Lands) be consulted in regard to the cumulative effects of clearing on this land, and that this impact be taken into account when considering the offset as discussed below. We also acknowledge that the clearing associated with the transmission line is relatively small, though there may ongoing disturbance due to access for maintenance activities.

Vegetation Communities

- It is assumed that the area of vegetation to be cleared for the proposal is 149.3 hectares as stated on page 7-13 of the EA. However, Table 7-2 (on the same page) details 141.4 hectares of clearing, though addition of the figures presented for each community totals 149.3. It is also unclear if this area includes temporary areas associated with construction of the solar plant. For example, on Page 4-11 of the EA it states "Once site works are complete, all temporary facilities and roadworks would be removed...and the site would be landscaped, as appropriate." OEH would like clarification on the location of these areas to determine if they are likely to impact on the ongoing management of offsets that are identified as part of the approval conditions.
- The assessment of vegetation has used of the classification described in the NSW Vegetation Classification and Assessment (NSW VCA) database. The information provided for each of the Map Units is useful information on the condition of the vegetation present and the extent to be impacted by the proposal. However, the vegetation map provided (Figure 7-1 of the EA) does not use the same classification of vegetation (it is the same communities as identified in the draft EA) and so it is difficult to correlate the figures presented in Table 7-2 (and the rest of the EA) with those presented in the map. As stated above, it is also unclear where the temporary work sites are located within the development footprint.

Threatened Fauna

- OEH considers the fauna surveys undertaken were inadequate to determine the full range of species present within the project site. The fauna species within the vegetation communities in the vicinity of Broken Hill have been poorly surveyed, and the species likely to be recorded are difficult to predict. For example, surveys for a project in similar

habitats and a similar distance to the east of Broken Hill to the proposed solar power station, recorded range extensions for threatened species of up to 150 kilometres and in different habitats than previously record. Additionally, the number of reptile species recorded is very low, probably reflecting the cool and wet conditions (compared to long-term average) at the time of survey, and a number of species recorded regularly in the Atlas of NSW Wildlife in the vicinity of Broken Hill were not recorded. OEH considers that since the fauna assessment was a one-off survey over a four day period and did not include pitfall trapping and/or funnel trapping, there is a reasonable likelihood that a number of species, particularly threatened mammals and reptiles, will occur on the site. However, we do note that the Assessment of Significance does adequately address all the species that would likely be impacted by the project, and agrees that with the development of an appropriate offset to assist in mitigation the conclusion of this assessment is correct (i.e. the proposal will not cause a significant impact).

- OEH agrees that the raptor nesting near the proposal is possibly a Black-breasted Buzzard and we support the precautionary approach that the proponents have taken in the assessment. The nest is located outside the area of clearing and we agree that the proposed implementation of a 500 metre buffer during construction is appropriate to mitigate potential impacts during this period. However, in recognition that loss of nest sites is the greatest impact on threatened raptors, particularly in a landscape with very few potential sites to begin with, OEH does have concerns about potential impacts during operation, though discussion with the proponents are that reflection and glare are unlikely to be significant. Therefore, monitoring of breeding activity at the nest site should be undertaken and if the species does abandon this site, then further mitigation, such as provision of an artificial structure to allow a new nest to be built within the offset area, may be required.

Offsets

- Despite the disturbed nature of the proposed site the assessment identified that the vegetation present is in generally good condition with some evidence of dieback (EA Page 7-4). Because of this and the potential for a number of threatened species to be present, OEH believes that an offset will be necessary to achieve an 'improve or maintain' outcome for biodiversity for the overall project. The EA details a commitment to develop an offset and discussions with both the proponent and their consultants have indicated that they have discussed with the lessee of the adjoining Western Lands Lease potential for part of this are to be included as an offset, in addition to the 60 hectares that is to remain undeveloped within the north west corner of the proposed site. We support this approach but feel that significant progress is required to ensure a viable offset is available before the proposal is operational, particularly in regards to the area of the offset required and the management actions that may need to be implemented.
- OEH notes the commitment to develop an Offset Management Strategy. It is appropriate that this strategy be developed in conjunction with OEH and that it be finalised before clearing operations commence. The strategy must include details on the area of the offset, vegetation communities present (and their current condition) and the final tenure of the land within the offset. One of the key considerations when developing the offset is the identification of a mechanism that protects the area in perpetuity. Currently there are a range of options available to achieve this goal, and OEH is happy to hold further discussion with the proponent and the Department of Planning and Infrastructure to identify the best option.
- OEH also notes the commitment to develop an Offset Management Plan. Once again this plan will need to be developed in conjunction with OEH and will need to be finalised prior to operation of the solar plant commencing. The plan must identify and fully cost management issues to be addressed on the offset, such as fencing, weed and feral animal control. It is recognised that some of these management actions may not be able to be identified until an offset area has been nominated. The plan must also detail monitoring that is to be undertaken to determine the effectiveness of the management actions

implemented and to determine whether the management of the offset is achieving benefits for the biodiversity present. Once again, OEH is happy to discuss management options once an area has been identified and the management activities required have been investigated.

Aboriginal cultural heritage

The Director General's Requirements for this project state:

1. *The EA must include an assessment of the potential impact of the project components on indigenous heritage values (archaeological and cultural). The EA must demonstrate effective consultation with indigenous stakeholders during the assessment and in developing options to avoid or mitigate unavoidable impacts (including the final recommended measures) consistent with Guidelines for Aboriginal Cultural Impact Assessment and Community Consultation (DEC, July 2005).*

The EA contains a detailed archaeological assessment of the potential impact of the project on indigenous heritage values (archaeological and cultural). Aboriginal community consultation was undertaken following both the DEC 2005 guidelines, and the DECC 2010 community consultation guidelines. Three registered parties were consulted at various stages of the assessment, including before, during and after fieldwork.

The draft EA was circulated to all the registered Aboriginal parties and limited comment was received with regard to the impact of the project on Aboriginal objects and the proposed mitigation strategies.

The EA reported on fourteen Aboriginal heritage locations which were assessed to have low to moderate significance. The project will impact on up to nine of these: seven isolated stone artefacts and two artefact scatters. The recommendations for these sites primarily centre around collection and relocation of these objects. OEH generally supports this assessment and recommendation.

OEH notes the draft commitment (IH1) to undertake further community consultation to develop an Aboriginal Heritage Management Plan (AHMP). OEH supports this commitment, and also recommends that the AHMP be developed in consultation with OEH. We would be happy to discuss the contents and development of the AHMP with the proponent.

Draft commitment IH2 refers to the development of 'protocols' for the protection and management of unidentified Aboriginal objects or suspected human remains. OEH believes these protocols should be included in the AHMP referred to in draft commitment IH1.

The AHMP will need to be finalised and implemented prior to operation of the solar plant commencing; this should be an action within the construction environmental management plan (CEMP).