

Appendix A Submissions



Your reference: Our reference: Contact:

MP10_0202 DOC12/45457; FIL12/10048 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

MARK SHÉAHAN

A/Manager Landscape and Aboriginal Heritage Protection (South)

Kechen 30.11.2012

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).



OUT12/31673

= 7 DEC 2012

Ms Kate Masters
Infrastructure Projects
NSW Department of Planning and Infrastructure
GPO Box 39
SYDNEY NSW 2001

Kate.Masters@planning.nsw.gov.au

Dear Ms Masters,

Broken Hill Solar Plant (MP10_0202) Response to exhibition of Environmental Assessment

I refer to your letter of 22 October 2012 requesting advice from the Department of Primary Industries in respect to the above matter.

Comment by Crown Lands

Crown Lands advise as follows:

- (i) Although the Environmental Assessment outlines the decommissioning processes that will be followed once the project reaches the end of its operational lifespan (approximately 30 years) (pages 4-15 in Section 4.5, and pages 5-28 in Section 5.3.3), it does not outline the costs and timeframes associated with the decommissioning processes.
- (ii) The Environmental Assessment states that the site would be re-vegetated as necessary to return it to its original state, as far as practicable. Crown Lands will require the site to be revegetated with locally endemic native vegetation species.
- (iii) Other matters previously raised by Crown Lands in the Department's letter of 16 July 2012 in relation to the adequacy of the draft Environmental Assessment have been addressed.

For further information please contact Reuben Butler, Natural Resource Management Project Officer (Dubbo office) on 6883 5416 or at: reuben.butler@lands.nsw.gov.au.

Comment by NSW Office of Water

The NSW Office of Water advise as follows:

(i) The project proposes installation of infrastructure for the solar panels over an area conveying flows to tributaries of Stirling Vale Creek. Although the Environmental Assessment indicates no modifications to watercourses and no construction within 40m of a watercourse is to occur, Figure 11-2 shows a significant number of flow paths through the site. The Office of Water requests clarification of construction in relation to watercourses and appropriate management of sediment and erosion control during construction and operational stages.

NSW Department of Primary Industries Level 6, 201 Elizabeth Street, Sydney NSW 2000 PO Box K220, Haymarket NSW 1240

Tel: 02 8289 3999 Fax: 02 9286 3208 www.dpi.nsw.gov.au ABN: 72 189 919 072

- (ii) The Office of Water recommends works within 40m of a watercourse to be carried out in accordance with the Guidelines for Controlled Activities on Waterfront Land (July 2012).
- (iii) Any approval of the application should be subject to the following condition:

The proponent is to prepare a Construction Environment Management Plan and Operation Environment Management Plan in consultation with and to the satisfaction of the NSW Office of Water prior to commencement of relevant activities.

For further information please contact Tim Baker, A/Manager Major Projects, Mines and Assessment (Dubbo office) on 6841 7403 or at: Tim.Baker@water.nsw.gov.au.

Yours sincerely

Phil Anquetil

Executive Director Business Services





WST11/00034/02

The Manager NSW Department of Planning & Infrastructure GPO Box 39 SYDNEY NSW 2001

Attention: Ms Kate Masters

Dear Ms Masters

RECEIVED

16 NOV 2012

Director-General

MP10_0202: Part Lot 6806 DP823918 (Western Lands Lease 14240); Barrier Highway, Broken Hill; Broken Hill Solar Plant

Thank you for your email of 23 October 2012 referring the Environmental Assessment (EA) for the proposed Broken Hill Solar Plant to Roads and Maritime Services (RMS).

It is noted that the proponent is still unsure as to the origin of heavy vehicles which will be required to access the site. The proponent has suggested that a Traffic Management Plan (TMP) be developed in consultation with RMS which would determine the level of intersection upgrade required at the access to the subject land from the Barrier Highway (HW8).

RMS will not object to the proposed development subject to the following requirements being included in any consent issued by Department of Planning & Infrastructure (DoP&I):

- The access to the subject land from the Barrier Highway (HW8) shall be upgraded prior to the commencement of construction works. In this regard, a Traffic Management Plan shall be prepared in consultation with RMS to outline measures to manage traffic related issues associated with delivery and construction of the solar plant or ancillary structures, any construction or excavated materials, any machinery and personnel involved in the construction, operation or decommissioning process. The plan shall detail the potential impacts associated with the development, the measures to be implemented and the procedures to monitor and ensure compliance. This plan shall address, but not necessarily be limited to;
 - (a) The origin, number, size, frequency and final destination of vehicles accessing/exiting the site;
 - (b) Loads, weights and lengths of haulage and construction related vehicles and the number of movements of such vehicles:
 - (c) The management and coordination of the movement of construction and workers vehicles to the site and measures to limit disruption to other motorists, emergency vehicles and school bus timetables;

Department of Planning
19 Nov 2012

Scanning Room

Roads and Maritime Services

- (d) Scheduling of haulage vehicle movement to minimise convoy length or platoons, Consideration should be given to minimise the route length for road transport of all oversize and overmass loads to minimise the impact on traffic;
- (e) Details of intersection improvement works in accordance with Austroads Guide to Road Design 2010 and RMS supplements;

The detailed traffic and transport planning for the project is required to involve the appointed transport contractor and RMS to determine the final details of haulage, including exact transport routes, road-specific mitigation measures and haulage timing. Road and Intersection improvement works shall be approved and completed prior to the commencement of construction of the solar plant.

- The intersection upgrade is located on a state road and the developer will be required to undertake private financing and construction of works on a road in which RMS has a statutory interest. A formal agreement in the form of a Works Authorisation Deed (WAD) is required between the developer and RMS prior to works commencing.
- A Road Occupancy Licence is required prior to any works commencing within three metres of the travel lanes in Mitchell Highway. Prior to any such works commencing, a licence will need to be obtained by contacting Mr Paul Maloney on (02) 6861 1686.
- To provide suitable storage capacity for the largest class of vehicle accessing the proposed lots, any gate, grid or similar structure installed in the access should be setback appropriately (20m for single articulated) from the edge of the road in Barrier Highway (HW8).
- All works to be at no cost to RMS.
- Reflection of sunlight from the solar panels (glare) shall not cause a nuisance, disturbance or hazard to the travelling public. In the event of glare from the solar plant being evident from a public road, the proponent shall immediately implement glare mitigation measures such as construction of a barrier (e.g. fence) or other approved device to remove any nuisance, distraction and/or hazard caused as a result of glare from the solar panels.

It would be appreciated if a copy of the determination for this project could be forwarded to RMS at the same time it is forwarded to the proponent.

Should you require further information please contact Andrew McIntyre on (02) 6861 1453.

Yours faithfully

Jacqueline Anderson

Acting Road Safety & Traffic Manager

Western

1,2 NOV 2012



Broken Hill City Council

... a safe, vibrant, prosperous and culturally rich City achieved through community leadership and sustainable management.

Quote No
L12/1626 - 11/467
PO:MR
Telephone / Personal Enquiries
Ask For Mr. P. Oldsen

Please address all communications to:
The General Manager,
240 Blende Street,
P.O. Box 448,
BROKEN HILL N.S.W. 2880
Telephone: (08) 8080 3300
Fax: (08) 8080 3424
ABN: 84 873 116 132
Email: council@brokenhill.nsw.gov.au

Website: www.brokenhill.nsw.gov.au

November 28, 2012

Department of Planning and Infrastructure GPO Box 39 SYDNEY NSW 2001

Dear Sir/Madam,

Exhibition of Environmental Assessment for Broken Hill Solar Plant MP 10 0202

Reference is made to the abovementioned proposal. You are advised that Broken Hill City Council has included a number of key strategies in its Integrated Strategic Plan in relation to renewable energy development in the region. This project aligns with those key strategies and is supported by the Broken Hill City Council.

Council has also reviewed the Environmental Assessment documentation in relation to the proposed development and requests that the following matter be addressed.

The prevailing wind direction and changes of weather are generally from the west of the City. The Regeneration Areas were originally established around the City in the late 1930's to assist in the prevention of dust lift off by the creation of a vegetation barrier. Given the relative location of this development in relation to the City, Council requests that all bare areas of land within the project site be actively managed so that it does not become a source of dust lift off during changes of weather or prevailing winds, by the use of suitable ground covers or dust suppressants.

Should any matter require clarification please contact the undersigned.

Yours faithfully,

<u>F. OLDSEN</u> GROUP MANAGER SUSTAINABILITY



Your reference:

MP10_0202

FIL10/14743;DOC12/44387

The Acting Director Infrastructure Projects Department of Planning and Infrastructure GPO Box 39 SYDNEY NSW 2001

Attention:

Kate Masters

Dear Ms Greenway

Re MP10_0202 - Broken Hill Solar Plant

Thank you for the electronic mail received by the Environment Protection Authority on 29 October 2012 requesting submissions on the Environmental Assessment (EA) for the proposed Solar Power Plant Project at Broken Hill.

The EPA has responsibilities for pollution control and environmental management for scheduled activities under the *Protection of the Environment Operations Act 1997* (POEO Act). Based on the information submitted the proposed solar farm is not a scheduled activity under the POEO Act and does not require an environment protection licence.

We have reviewed the EA and have no further comments or objections in relation to the proposed solar farm.

If you have any further enquiries about this matter please contact me by telephoning 02 6969 0700.

Yours sincerely

JASON PRICE

Acting Head, Griffith Unit

Environment Protection Authority

23.11.2012





Our reference: OUT12/30568

Kate Masters NSW Dept Planning & Infrastructure GPO Box 39 Sydney NSW 2001 Department of Planning Received 2 6 NOV 2012 Scanning Room

Dear Kate

Re: Exhibition of Environmental Assessment for Broken Hill Solar Plant (MP10_0202)

Thank you for the opportunity to comment upon this proposal. This response is from the Resources & Energy division of NSW Trade & Investment. Other agencies of the department will forward separate correspondence regarding this matter.

There are no concerns with this proposal with regards to mineral resources.

Should you require further information regarding mineral resources please contact Gary Burton, Senior Geologist, Orange office on 6360 5330 or email gary.burton@industry.nsw.gov.au.

Yours faithfully

Cressida Gilmore

Chief Geoscientist, Land Use Minerals & Land Use Assessment

Geological Survey of NSW

23 November 2012



Appendix B Little Eagle test of significance

Little Eagle (Hieraaetus morphnoides)

How is the project likely to affect the lifecycle of a threatened species and/or population?

The Little Eagle was not detected during the site survey. This species occurs throughout the Australian mainland excepting the most densely forested parts of the Dividing Range escarpment. It occurs as a single population throughout NSW which includes arid woodland and shrublands as are found on the site.

There are no nest sites, nor opportunities to nest, roost or perch on the site. The species nests in tall living trees which are not present at the site, and therefore the species would only use the site for hunting prey.

Little Eagles exhibit large home ranges and use a variety of habitat types for hunting, favouring woodland and riparian tree cover as well as shrubland and grasslands (Olsen 1995). The shrubland habitats on the project site provide potential foraging habitat, however other taller woodland and mulga habitats in the locality surrounding Broken Hill are also expected to provide important foraging habitat.

The project has the potential to impact on an area of shrubland habitat that potentially provides habitat for prey species. However, the proposed direct and indirect loss of vegetation from the site would impact on a relatively small area of habitat for prey species, and similar habitats are widespread throughout the region. While there may be some short to medium term impacts during construction, the project is not expected to have a long-term negative impact on the foraging lifecycle activities of this species.

How is the project likely to affect the habitat of a threatened species, population or ecological community?

The project will remove up to approximately 140.4 ha of potential habitat for prey species. This impact would be limited to the site only. The importance of the site for foraging is not known for the Little Eagle and the habitats to be affected are common and widespread in the surrounding landscape.

Does the project affect any threatened species or populations that are at the limit of its known distribution?

The species occurs throughout the Australian mainland excepting the most densely forested parts of the Dividing Range escarpment.



How is the project likely to affect current disturbance regimes?

The current disturbance regimes on the site include minor weed invasion, soil erosion, and predation and grazing from feral animals. The project has the potential to increase opportunities for weeds and feral animals through physical alteration of the landscape. It is proposed to manage this impact through implementation of an Environmental Management Plan, including weed and feral animal control measures as well as a monitoring program and adaptive management approach.

How is the project likely to affect habitat connectivity?

The proposal will not increase fragmentation of habitat or significantly reduce the amount of habitat in the locality. The habitat on the site is widespread across the surrounding landscape and the site is not located in an obvious wildlife corridor, nor will the connectivity of habitat in the landscape be significantly affected.

How is the project likely to affect critical habitat?

None of the habitats present in the study area are registered on the current list of recommended or declared critical habitat in NSW under the *Threatened Species Conservation Act 1995*.



Appendix C Preliminary project layout

