

Jack Turner
Senior Environmental Assessment Officer
Energy Resource Assessments
Department of Planning, Industry and Environment
Email: Jack.Turner@planning.nsw.gov.au

Advice provided via the Major Projects Portal

Dear Mr Turner,

Advice on RTS – State Significant Infrastructure – Hunter Power Project (Kurri Kurri Power Station) (SSI-12590060)

Our ref: DOC21/683284-3

Your ref: SSI-12590060

Thank you for your referral on 9 August 2021 inviting comment from Heritage NSW on the Response to Submissions (RTS) for the above state significant infrastructure (SSI) proposal.

Heritage NSW has reviewed the following RTS documents in our assessment:

- Hunter Power Project Response to Submissions: Submissions Report Rev1 prepared by Jacobs, dated 4 August 2021; and
- Hunter Power Project Response to Submissions Aboriginal Heritage Assessment Addendum prepared for Snowy Hydro Ltd by Jacobs, dated 30 July 2021 (the addendum report).

Response to Submission

The RTS responded to several issues raised by Heritage NSW by providing an addendum report. Following a review of the addendum report, Heritage NSW advises that it is adequate in addressing the RTS based on the significant depth of fill that exists in the project area. We note the addendum report now includes management and mitigation measures based on our previous comments however, we recommend the monitoring procedure needs to provide further information on the methodology for test and/or salvage excavations, and the long-term management of Aboriginal objects.

Heritage NSW recommend the following additions to the Addendum report:

Section 2.1.2 Procedure for archaeological monitoring of site works

- Clarify how many test pits will be excavated at each location of intact alluvial deposit.
- Clarify the size and spacing of pits (e.g. 50cm x 50cm pits at 5m spacing on a 20m transect, or a series of transects forming a grid).
- Clarify whether the excavations will be extended to an open area pit under specific circumstances (e.g. if dense or stratified deposit or unusual cultural features are uncovered).
- Clarify whether there are specific circumstances under which large scale salvage excavation will be undertaken.
- Provide information about the long-term management of any Aboriginal objects recovered during testing and/or salvage.

 Add a statement committing to the preparation of a monitoring report describing any Aboriginal objects uncovered during monitoring that will be submitted to Heritage NSW and AHIMS.

If you have any further questions in relation to this matter, please contact Sarah Robertson, Archaeologist, Aboriginal Cultural Heritage Regulation – South, at Heritage NSW on on 6229 7088 or email at sarah.robertson@environment.nsw.gov.au.

Yours sincerely

Jackie Taylor
Senior Team Leader, Aboriginal Cu

Senior Team Leader, Aboriginal Cultural Heritage Regulation - South

Heritage NSW 23 August 2021



Our ref: DOC21/680571-5 Your ref: SSI-12590060

Mr Jack Turner
Senior Environmental Assessment Officer
Energy Resource Assessment
Department of Planning, Industry and Environment
jack.turner@planning.nsw.gov.au

Dear Mr Turner

Response to Submissions Report – Hunter Power Project (Kurri Kurri Power Station) (SSI-12590060)

I refer to your email dated 9 August 2021 in which Planning and Assessment Group invited Biodiversity and Conservation Division (BCD) of the Department of Planning, Industry and Environment (the Department) to comment on the response to submissions report for the proposed Hunter Power Project (Kurri Kurri Power Station) (SSI-12590060), located at Hart Road, Loxford, about one kilometre (km) east of the M15 Hunter Expressway and about three km's north of the town of Kurri Kurri; in the Cessnock local government area.

BCD has reviewed the 'Hunter Power Project Response to Submissions – Submissions Report: Rev1' as prepared by Jacobs Group (Australia) Pty Limited (dated 4 August 2021), including relevant appendices, annexures, and attachments in relation to impacts on biodiversity and flooding.

BCD's recommendations are provided in **Attachment A** and detailed comments are provided in **Attachment B**. If you require any further information regarding this matter, please contact Steve Lewer, Senior Regional Biodiversity Conservation Officer, on 4927 3158 or via email at rog.hcc@environment.nsw.gov.au

Yours sincerely

19 August 2021

STEVEN CRICK
Senior Team Leader Planning
Hunter Central Coast Branch
Biodiversity and Conservation Division

Enclosure: Attachments A and B

BCD's recommendations

Hunter Power Project (Kurri Kurri Power Station) (SSI-12590060)

Biodiversity

- 1. BCD is satisfied that recommendations 1, 3 and 4 of BCD's biodiversity comments on the EIS (dated 9 June 2021) have been satisfactorily addressed in the response to submissions report.
- 2. BCD recommends that the accredited assessor re-asses serious and irreversible impacts to regent honeyeater if the proposed clearing impacts of constructing a retention dam is reduced. This may require a re-calculation of the biodiversity credits in the BAM credit calculator

Flooding

- 3. Detailed design should consider fit for purpose erosion control measures which do not require a sediment control basin excavated below the water table.
- 4. The proponent should reconsider off site flood impacts and management of stream erosion flows during detailed design.
- 5. Detailed design of pollution controls should consider removing the proposed open pond and using a treatment train approach suitable for the likely pollutants which would be generated by this development. Management of spills and road runoff will be key requirements.

BCD's detailed comments

Hunter Power Project (Kurri Kurri Power Station) (SSI-12590060)

Biodiversity

1. Further information has been provided to address previous recommendations on biodiversity

Further information has been provided on recommendations 1, 3 and 4 raised in BCD's letter dated 9 June 2021 (DOC21/356512-11).

Recommendation 1

BCD is satisfied that recommendations 1 and 2 of BCD's biodiversity comments on the EIS (dated 9 June 2021) have been satisfactorily addressed in the response to submissions report.

2. The removal, in part of the retention basin will further reduce impacts to SAII species

Previously, BCD stated it did not clearly understand why the proposal could not be moved 100 – 150 meters south to avoid most impacts associated with the mapped important habitat areas connected with the regent honeyeater, and biodiversity in general. This would have avoided the triggering of serious and irreversible impacts (SAII) to the regent honeyeater. As such BCD requested why the proposal could not be moved slightly to the south.

The proponent (via Jacobs) has stated that moving the Proposal Site south was considered, but was not viable as it would extend the connection distance to the powerlines, and reduce the distance between the power station and the closest residences which would mean the requirements of the Industrial Noise Policy may not be met for those residences. BCD acknowledges this reasoning, and the proposal is considered to have adequately addressed 'avoid and minimise' requirements that relate to this issue.

The proponent (via Jacobs) has also adequately stated that the proposal will not remove an area of significant habitat, despite overlaying a portion of the important habitat mapping, as it contains no key foraging species, with the exception of low numbers of stringybark. There are no significant impacts predicted to foraging habitat for the regent honeyeater because of the minor clearing required for this proposal. Additionally, Appendix B of the BDAR, includes a detailed assessment of SAII as per the BAM and concluded that the proposal is unlikely to result in a significant impact, reduce the population size or decrease the reproductive success of the regent honeyeater. BCD supports these conclusions.

Nevertheless, BCD's Water Floodplain and Coast team indicates that the retention basin may be able to be reduced (as raised in Points 4 and 5 below). If this is the case then impacts to SAII species will be further reduced, including offset requirements, as the proposed clearing of all the mapped important habitat will not be required.

Recommendation 2

BCD recommends that the accredited assessor re-asses serious and irreversible impacts to regent honeyeater if the proposed clearing impacts of constructing a detention dam is reduced. This may require a re-calculation of the biodiversity credits in the BAM credit calculator.

Flooding

3. Erosion and Sediment controls proposed require significant site disturbance

The site is primarily a brownfield site with minimal additional earthworks or clearing required for development. Plant and equipment will be founded on piers and it is likely that the impact of this degree of earth disturbance can be managed on site without extensive sediment basins. It is noted that construction is proposed to be over a two-year time frame. The proposed sediment basin appears to have been sized for disturbance of the entire site with no mitigation measures or staging of site disturbance.

Access by plant and equipment during construction will disturb existing surfaces and may result in generation of sediment laden runoff. This can be better managed through stabilisation of access roadways, alternative lower-impact sediment control measures and potentially by installation of primary road base layers earlier in the construction process to minimise sediment generation.

The largest bulk earth works appear to be for the sediment basin which is intended post construction be converted into combined on site detention and pollution control pond.

Recommendation 3

Detailed design should consider fit for purpose erosion control measures which do not require a sediment control basin excavated below the water table.

4. The need for large on-site detention has not been demonstrated

The proposed on-site detention has been designed to manage flows from storm events up to the 1% Annual Exceedance Probability (AEP) event. The EIS notes that the site is within the backwater area for Hunter River flooding and reports to Hunter river estuary via Wentworth Swamp. As such it is considered that the need for management of matching flows up to a 1% AEP event has not been demonstrated. Management of flows likely to result in streambank erosion, more frequent storm flows and increased runoff due to impervious surfaces is considered to be more critical in this location. Water Sensitive Urban Design (WSUD) options which retain and reuse water on site are likely to have a much more significant benefit than on-site detention and open pond structures.

Recommendation 4

The proponent should reconsider off site flood impacts and management of stream erosion flows during detailed design.

5. Pollution controls are not fit for purpose

The pollution control modelling has been updated to include revised impervious areas which are now consistent with the hydrology report. Figure 3.1 of the response includes proposed surface treatments which include sealed roadway, crushed rock, asset protection zones, landscaping and areas labelled as grass/road base. It is unclear what surface finish will occur in the asset protection zone and the grass/road base area will behave differently if it is grass rather than road base.

MUSIC modelling prepared for the proposed development appears to have adopted an industrial pollutant node for the entire site rather than a detailed model of the various pollutant generating activities on site. Pollution control has been modelled using a leaky open pond. Ponds are included in the suite of treatment options for MUSIC because urban landscapes frequently incorporate ponds and they do provide some treatment benefit, however; ponds are the lowest efficiency of any treatment measures and are typically included for amenity

purposes only. Unless the pond is required for operational purposes, other treatment measures that perform better and have lower impacts are likely to be more suitable. The pond is proposed to be excavated below the water table which will mean that direct contact between potentially contaminated stormwater flows and the water table could occur. MUSIC is not able to model this scenario and it is likely that interrogation of MUSIC outputs for this project will show that pollutants are lost because water is leaking through the base of the unlined pond and taking pollutants with it.

Increasing the size of the proposed treatment pond until pollution control outcomes are demonstrated is not considered appropriate. Use of a large open pond also increases the risk that a significant spill or pollution incident on site will result in a large volume of contaminated water. A treatment train approach would be a much more beneficial outcome.

Recommendation 5

Detailed design of pollution controls should consider removing the proposed open pond and using a treatment train approach suitable for the likely pollutants which would be generated by this development. Management of spills and road runoff will be key requirements.

.

Public Authority Response

Monday, 23 August 2021 9:56:22 AM AEST

Notes:

Dear Jack

Please be advised that Cessnock City Council (Council) has been consulted in the preparation of this application. Council requests that due consideration be given to the comments previously made. Council reiterates that it supports development that adds economic growth and particularly development that creates local jobs. The following should be noted:

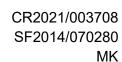
* Council has identified any additional social impacts that have not been identified by the proponent in the EIS or raised through submissions by public authorities, organisations and members of the public. I note that the NSW Environment Protection Authority, NSW Health, organisations and members of the public have made submissions on the EIS regarding the ongoing management of air quality and noise which may have an impact on public health.

*Council is satisfied with the information submitted relating to the Biodiversity Development Assessment Report.

*Council requests that contributions be levied in accordance with Council's s7.12 plan.

Council appreciates the opportunity to comment on the development.

If you have any questions on this matter, please contact Peter Giannopoulos Team Leader Development Services on (02) 4993 4112.





11 August 2021

Department of Planning, Industry & Environment Industry Assessments
GPO Box 39
SYDNEY NSW 2001

Attention: Jack Turner

THE HUNTER EXPRESSWAY (M15): SSI 12590060, KURRI KURRI POWER STATION, HART ROAD, LOXTON

On 9 August 2021 Transport for NSW (TfNSW) accepted the referral of Response to Submissions by the Department of Planning, Industry and Environment (DPIE) through the Planning Portal regarding the abovementioned application. DPIE referred the application to TfNSW for comment. This letter is a submission in response to that referral.

TfNSW has previously reviewed the proposal and provided formal comment dated 1 July 2021. In response, the proponent lodged a Response to Submissions report by Jacobs (refer Project No. IS354500, Revision 1, dated 4/8/2021) addressing matters raised by TfNSW.

In section 4.10 of the submitted report, the proponent has a noted and agreed to the key issues raised by TfNSW. Accordingly, TfNSW raises no objection to the proposed development.

On determination of this matter, please forward a copy to TfNSW for record and / or action purposes. Should you require further information please contact Masa Kimura Development Services Case Officer, on 4908 7688 or 0407 707 999 or by emailing development.hunter@transport.nsw.gov.au.

Yours sincerely
Kylin-Anne Pont

Kylie-Anne Pont

A/ Team Leader Development Services

Development Services North