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NEWCASTLE OFFICE

17 February 2021

AGL Energy Limited

Attention: Todd Fuller

Subject: Bayswater Power Station Upgrade (SSD 9697) - Review of Environmental Impact Statement – Response to remaining BCD Comments on Biodiversity Development Assessment Report (BDAR)

BACKGROUND INFORMATION

The Project

Kleinfelder were engaged by Jacobs on behalf of AGL Energy Limited (AGL) to prepare a Biodiversity Development Assessment Report (BDAR) to support the Environmental Impact Statement (EIS) for the Bayswater Power Station Upgrade (SSD 9697). The EIS was reviewed by the Biodiversity Conservation Division (BCD) of the Department of Planning, Industry and Environment (DPIE), in relation to impacts on biodiversity (including matters of national environmental significance (MNES) under the *Environment Protection and Biodiversity Conservation Act 1999*. Muswellbrook Council were also invited to comment on the BDAR.

Kleinfelder has since revised the BDAR (9 December 2020) based on the comments provided and have summarized these in a Response to Submissions Report (7 January 2020). Further information has been requested by BDC (29 January 2021) in regard to two remaining matters. Each of the comments has been addressed are presented below.

If you have any questions, please get in touch at your earliest convenience.

Yours sincerely,

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BCD comment 1. Surveys for *Thesium australe* were outside of the recommended survey months

Table 5.2 (on page 20) of the Response to Submissions (RTS) report provides a summary of the assessment of the likely occurrence of *Cynanchum elegans* (White-flowered Wax Plant), *Rhodamnia rubescens* (Scrub Turpentine), and *Thesium australe* in the development area. Biodiversity and Conservation Division (BCD) is now satisfied that the development footprint is unlikely suitable habitat for *Cynanchum elegans* and *Rhodamnia rubescens*. However, all of the flora surveys conducted for the RTS report were conducted outside the survey period for detecting *Thesium australe*. As described in the Threatened Biodiversity Data Collection, the recommended survey months are from November to February; and the additional flora surveys were done in July, September and October. Therefore, the presence of *Thesium australe* on the site cannot be discounted. BCD requires that the proponent either identifies the reference site used to determine that surveys outside of the recommended survey months were appropriate, or assumes presence of *Thesium australe* or prepares an expert report for the species.

Response

It is noted that while *Cynanchum elegans* (White-flowered Wax Plant) and *Rhodamnia rubescens* (Scrub Turpentine) were not identified by the BAM Calculator (informed by the Threatened Biodiversity Data Collection) as threatened species that require further assessment for the project, BCD are satisfied that these species do not require survey despite records within the IBRA Sub-region. Justification for these species being discounted from further assessment, and requirement to survey, was based on habitat suitability and occurrence within the locality (10kms of the study area).

Similarly, habitat suitability and occurrence of *Thesium australe* with the locality was reviewed to inform the species inclusion as a Candidate threatened species. It is noted that the BAM Calculator did not predict this species as requiring further assessment (targeted survey) i.e. the species is not associated with any of the PCTs occurring within the Study Area. As reported in Appendix 2 of the BDAR, consideration was made to the habitats which occur within the Study Area and the proximity to records of the species within the locality. Based on this assessment, it was determined that the species has a low likelihood of occurrence due to the predominance of exotic grasslands, scarcity of damp areas and lack of host flora for parasitisation (prefers native grasslands, often in damp sites and typically in association with *Themeda australis*) and knowledge that the species has not been detected within the locality. Closest records are at distances of approximately 23 kms, 30 kms, 100 kms and 106 kms indicating that the species is extremely uncommon within the broader locality and IBRA subregion (2 records from 2006 and 2011).

In accordance with Section 5.2.1.5 of the BAM, *if any one of the criteria* (2.a–2.f) relevant to the threatened species is not met, the subject land should be considered as unsuitable habitat for that species. No further assessment is required for that species.



Based on the above, Criteria C (species association with PCTs on site) is most relevant to *Thesium austral* as the vegetation communities are not linked to the species, however, the distribution of the species within the IBRA subregion has also been taken into consideration (applicable to Criteria A and B). As such all criteria are not met, no further assessment was undertaken for the species.

Nonetheless, threatened flora surveys were conducted on 2 December 2019 and 6 January 2020 (within the survey period for *Thesium australe*). While the species was not specifically targeted during these surveys, the species was not detected.

BCD comment 2. The accredited assessor needs to demonstrate that vegetation meets the definition of non-native groundcover to use the paddock tree calculator

Table 5.2 (pages 21 & 22) and Section 3.2.1.10 of the RTS Report provides a summary of the exotic groundcover species in the areas of non-native vegetation where the paddock tree calculator has been applied. However, the proponent has not demonstrated that the native vegetation meets the definition of native vegetation that comprises the groundcover, which is:

- i. less than 50% of the cover of indigenous species of vegetation, and
- ii. not less than 10% of the area is covered with vegetation (whether dead or alive), and
- iii. the assessment is made at the time of year when the proportion of the amount of indigenous vegetation in the area to the amount of non-indigenous vegetation in the area is likely to be at its maximum.

Given it appears that no plots or transects were conducted in the vegetation zones identified as Non-native Vegetation - Exotic Grasslands, the vegetation present may not meet the definition outlined above for non-native groundcover. Additional Biodiversity Assessment Method (BAM) plots or appropriate justification is required from the accredited assessor to demonstrate that these communities are non-native and permissible for use under the Paddock Tree Calculator. In the absence of such data vegetation with the paddock trees must be treated as a zone of native vegetation and included in the BAM, with the credits to be offset.

Response

It is noted that plots of transects were not undertaken within vegetation zones identified as non-native vegetation (typically not required) to quantitatively determine that native vegetation comprises less than 50% of the overall cover. Additional field surveys would be required to categorically show that areas of exotic grassland do in fact comprises less than 50% native cover of all ground cover species (which is likely to come at a cost to our client with no expected change in the determination). Furthermore, it is noted in Appendix 1 of the BAM (2017) that there is no specific requirement that vegetation plots are required to support the determination of non-native vegetation cover. Botanists that undertook the vegetation mapping have relied on their professional judgement to visually conclude that areas mapped as exotic grassland



comprises an exotic ground cover in excess of 50%. Rapid Data Points were collected using a handheld GPS to log obvious changes in vegetation composition, including the predominate groundcover species throughout areas classified as exotic grasslands. This is generally an acceptable method to map areas of exotic grassland where there is a distinct lack of native species without the need to undertake vegetation plots.