

13 June 2023

Our ref: BJT:219609
Your ref: SSD-45242780

Director - Energy Assessments, Development Assessment
Department of Planning and Environment
Locked Bag 5022
Parramatta NSW 2124

Brendan Tobin
Partner
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Dear Sir/Madam,

**State Significant Development Application SSD-45242780
Orana Battery Energy Storage System**

- 1 We refer to the assessment of the state significant development application lodged by Akaysha Energy Pty Ltd (**Applicant**) in relation to the Orana Battery Energy Storage System development (**Orana BESS**) by the Minister for Planning and Public Spaces (**Minister**).
- 2 This letter is a submission by Shirley Angophora Pty Ltd ACN 628 289 458 (**Shirley Angophora**).
- 3 Shirley Angophora is the registered proprietor of 6773 Goolma Road, Wuuluman, which is Lot 32 in Deposited Plan 622471 (**Property**). The Property is located directly adjacent to the land subject of the Orana BESS project.
- 4 Shirley Angophora objects to the proposed Orana BESS project because of the unacceptable impacts of the Orana BESS and the Environmental Impact Statement's (**EIS**) significant failure to properly consider the impacts of the Orana BESS on the Property.

The Property

- 5 The Property comprises:
 - (a) a residential home (the **Homestead**);
 - (b) a second residential home that has been used as a rental cottage for tenants for decades (**the Farm Cottage**); and
 - (c) agricultural land used for farming and livestock grazing.
- 6 The Homestead, which is occupied by residents, is located approximately 870m south-east of the Orana BESS development area, is occupied by residents. The Farm Cottage, which is occupied by tenants, is located approximately 720m south-east of the Orana BESS development area. The remaining area of the Property is used agriculturally for farming and livestock grazing.
- 7 The proposed Wellington South Battery Energy Storage System project (State Significant Development Application SSD-27014706) (**Wellington BESS**) is located on the Property,

approximately 300m east of the Orana BESS. The assessment of the Wellington BESS project has commenced. The project has been exhibited and is currently in the 'Response to Submissions' stage of the assessment process.

- 8 The Orana BESS and the Wellington BESS are both proposed to operate in the same approximate area, due to the close proximity to the TransGrid 330kV substation and the Wellington North solar farm. Proximity to the substation and solar farm is beneficial for both proposed developments, as it will avoid the need for high voltage powerlines and reduce additional visual impacts.
- 9 Figure 1-4 of the EIS identifies 'nearby receivers' to the Orana BESS development. The Homestead on the Property is identified on this map as Receiver 'R2' (a non-associated residential receiver) and is referred to throughout the EIS. However, the Farm Cottage located on the Property, which is situated 150m closer to the Orana BESS development area than Receiver R2, has not been identified as a residential receiver in Figure 1-4 or anywhere else in the EIS.
- 10 This is a major deficiency of the EIS, which means the impacts of the Orana BESS on the Farm Cottage located at the Property have not been identified or assessed at all.

Noise Impacts

- 11 The EIS has failed to properly undertake an assessment of the noise impacts of the Orana BESS on the Property. In particular, the extent of the cumulative noise impacts on the Property is currently unknown, as the EIS fails to consider the cumulative noise impacts of the neighbouring Wellington BESS project during the operational phase of both projects.
- 12 The Secretary's Environmental Assessment Requirements (**SEARs**) issued for the Orana BESS on 11 July 2022, states that the EIS must include an assessment of the likely impacts of the development on the environment, focusing on specific issues including:

'an assessment of the likely impacts of all stages of the development (which is commensurate with the level of impact), including any cumulative impacts of the site and existing or proposed developments in the region in accordance with the Cumulative Impact Assessment Guideline (DPIE, Nov 2021).'

- 13 Section 7.3.1 of the EIS states that an assessment of cumulative impacts has been undertaken in accordance with the NSW Government's *Cumulative Impact Assessment Guidelines for State Significant Projects* (DPE, 2022b) (**Guidelines**).
- 14 Table 2 of the Guidelines sets out the relevant future projects that should be considered as part of a cumulative impact assessment in an EIS for state significant development. Relevantly, this includes 'projects under assessment', for example, projects where the application for the project has been exhibited and is currently under assessment.
- 15 Further, section 3.1 of the Guidelines state that:

'If the proponent is uncertain about whether a matter requires cumulative impact assessment in the EIS, it is to adopt a cautious approach and identify the matter for further assessment. This will ensure the potential cumulative impacts on this matter are investigated further during the preparation of the EIS, even though these investigations may ultimately determine that the cumulative impacts on the matter will not be material.'

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- 16 Given the status of the Wellington BESS, it is clear that this project should be considered as a 'relevant future project' to be included in a cumulative impact assessment for the Orana BESS EIS.
- 17 The cumulative assessment approach specified in clause 7.3.1 of the EIS identifies a number of 'Project-level CIA - risks of exacerbating adverse impacts', including impacts on biodiversity, visual and landscape character, traffic and pressure on local facilities, goods and services. However, cumulative noise impacts have been omitted from this list. This appears to be a significant failing in the assessment approach of cumulative impact assessment in the EIS, as it is clear that local cumulative noise impacts may arise from the concurrent operation of the Orana BESS and the Wellington BESS projects that are located only 300m apart.
- 18 We note that section 7.3.3 of the EIS lists the Wellington BESS project as a renewable project in the locality, however the only mention of cumulative noise impacts contained in the EIS states that:
- 'The Orana BESS Project has also been designed such that feasible and reasonable noise strategies would ensure low risk of noise exceedances in construction and no exceedances are predicted from operation.'*
- 19 Relevantly, there is no identification of discussion of what these 'feasible and reasonable noise strategies' are, or what assessment was undertaken that confirms there will be 'no exceedances' in noise impacts arising from the operation of the Orana BESS and other renewable projects in the locality.
- 20 The Orana BESS EIS further considers noise impacts of the proposed development at *Appendix E6 - Noise and Vibration Assessment, Renzo Tonin, 31 March 2023 (Noise Report)*.
- 21 Section 5.6 of the Noise Report sets out a 'cumulative operation noise assessment', which is based on the concurrent operation of the Orana BESS and the 'Wellington Solar Farm' only. On the basis of this assessment, the Noise Report concludes that *'no further reasonable and feasible noise mitigation measures are required.'*
- 22 The cumulative operational noise assessment contained in the Noise Report fails to comply with the requirements of the Guidelines, as it does not consider or assess the cumulative noise impacts arising as a result of the concurrent operation of the Orana BESS and the Wellington BESS, which is a 'relevant future project'.
- 23 Without considering the noise impacts of the Wellington BESS operating concurrently with the Orana BESS, the cumulative operational noise assessment is deficient.
- 24 Further, the Noise Report fails to:
- (a) identify the Farm Cottage located at the Property as a residential receiver;
 - (b) assess the noise impacts of the Orana BESS on the Farm Cottage, which is located 150m closer to the development area than receiver R2; or
 - (c) identify any mitigation that may be required to address adverse impacts of the Orana BESS on the Farm Cottage.

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- 25 We have **attached** an independent *Environmental Noise Assessment Review* of the operational noise component of the Noise Report, which has been undertaken by acoustic consultants Sonus Pty Ltd (**Sonus Review**).
- 26 The Sonus Review states that the Noise Report is deficient in several areas, including:
- (a) noise modelling;
 - (b) low range of predictions for meteorological conditions;
 - (c) discrepancy between noise output and noise level received;
 - (d) assessment based on incorrect ground type;
 - (e) failure to include a second residence north-west of Receiver R2 (i.e. the Farm Cottage); and
 - (f) failure to include Wellington BESS in cumulative noise assessment.
- 27 Shirley Angophora is concerned that, without an accurate noise assessment of the Orana BESS project being undertaken, the Property (including the Homestead, Farm Cottage and agricultural operations and livestock) will be adversely impacted by noise during both the construction and operational phases of the project. Any such adverse noise impact must be mitigated by the Applicant.
- 28 As such, we request the Applicant:
- (a) undertake a comprehensive noise assessment of the impacts of the Orana BESS, which addresses all the deficiencies in the EIS and the Noise Report that are identified in this objection, in particular the cumulative impacts of the Orana BESS and Wellington BESS projects and any noise impacts on the Property; and
 - (b) provide our client with a copy of all revised noise impact assessments for review.
- 29 We also consider that the Minister cannot determine the development application for the Orana BESS project until a revised noise impact assessment occurs.

Other Impacts

- 30 We consider that the EIS does not contain sufficient information on the cumulative impacts of the Orana BESS that will impact the Property, especially in respect to landscape and amenity issues, construction phase impacts and traffic impacts. Consequently, the impacts of these issues on the Property are currently unclear.
- 31 In order to ensure that the Orana BESS does not adversely impact on the Property, we request the Applicant provide further information regarding the cumulative impacts of the Orana BESS and the Wellington BESS on the Property in respect to landscape and amenity issues, construction phase impacts and traffic impacts.

Conclusion

- 32 Shirley Angophora objects to the proposed Orana BESS project because of the unacceptable impacts of the Orana BESS and the EIS' significant failure to consider the impacts of the Orana BESS on the Property properly, or not at all.

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- 33 We request the Applicant undertakes further assessments which addresses the current deficiencies in the EIS' assessment of the impacts of the Orana BESS on the Property, and provides the revised assessments to our client for consideration.
- 34 Shirley Angophora also reserves the right to request further information and make further submissions in relation to the impacts of the Project on the Property, once adequate environmental impact assessments have been completed by the Applicant.

Yours faithfully

Hall & Wilcox

Hall & Wilcox

Annexure - *Environmental Noise Assessment Review, Sonus Pty Ltd, 13 June 2023*

Hall and Willcox
Level 4
400 Hunter Street
NEWCASTLE NSW 2300

S7789C1

Attention: Katrina Reye

13 June 2023

Dear Katrina,

**ORANA BESS
ENVIRONMENTAL NOISE ASSESSMENT REVIEW**

As requested, a review has been conducted of the operational noise component of the Orana Battery Energy Storage System “Construction & Operational Noise & Vibration Assessment” (the **Assessment**)

The Assessment provides predicted noise levels at sensitive receivers based on stated sound power levels for operational equipment. The total sound power level for the operational equipment totals approximately 123 dB(A). The predicted noise level at the closest receiver R1, which is less than 1km from the equipment, ranges from 32 dB(A) to 33 dB(A). This level is significantly lower than would be expected given the sound power levels and distance. The Assessment does not provide sufficient information to understand the apparent discrepancy. For example:

- Although the Assessment states that the CadnaA software is used, the noise model is not stated.
- There is very little difference (1 dB(A)) between the range of predictions for different meteorological conditions without explanation. A much greater difference would be expected.
- It is not clear if the required meteorological conditions of a moderate temperature inversion and a downwind breeze of 2m/s has been modelled.
- The Assessment states that *possible noise control treatments* are included and that the noise prediction model takes into account *attenuation from barriers (natural and purpose built)*. However, no barriers or noise control treatment is described in the Assessment or in the EIS.
- The ground type is nominated as “soft”, but the equipment is likely to be installed on a hardstand.

In addition to the concerns regarding the predictions, the following issues should be addressed:

- Receiver R2 shows a single residence, but it is understood that there is a second residence, closer to the proposed BESS.
- The cumulative noise assessment does not include the Wellington South BESS.

If you have any questions or require clarification, please call me.

Yours faithfully
Sonus Pty Ltd



Chris Turnbull
Principal

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