

Mandana Mazaheri

From: Nicholas Hon
Sent: Tuesday, 9 October 2018 10:19 AM
To: Mandana Mazaheri
Subject: RE: Yarrabee Solar (SSD 9237) - Exhibition

Hi Mandana,

My apologies for the delay.

In reviewing the EIS (Appendix G – Hazards and Risks), it is noted that the SSD includes a battery energy storage system with capacity of approximately 35 MW / 70 MWhr. This system will either be based on modular system or containerised system. Such systems are similar to systems described in other solar-related SSDs such as Darlington Point SSD 8392.

Given that the capacity system is below relatively low (i.e. below 40 MW, compared to 275 MW for SSD 8392) and that the SSD is remotely situated from other land-uses, the qualitative approach taken in Appendix G is appropriate and generally in accordance with the Department's *Hazardous Industry Planning Advisory Paper No. 6, 'Hazard Analysis'* guideline. In particular, Appendix G sufficiently identified the hazards and relevant safeguards for the system, demonstrating that the SSD can comply with the Department's *Hazardous Industry Planning Advisory Paper No. 4, 'Risk Criteria for Land Use Safety Planning'*. As such, the development is not precluded on hazards and risks grounds.

In considering potential changes in battery design and to ensure continual safety throughout the life of the development, it is recommended that the following conditions be included in the consent. These conditions are in-line with the Department's HIPAP 12 and the standard conditions for solar farms (as discussed with Dianna Mitchell). Additional conditions from Fire and Rescue NSW and NSW RFS are also to be included in the consent.

HAZARDS AND RISKS

Fire Safety Study

1. At least one month prior to construction of energy storage plant or equipment such as battery storage (except for construction of those preliminary works that are outside the scope of the hazard studies), or within such further period as the Planning Secretary may agree, the Applicant must prepare and submit for the approval of the Planning Secretary a Fire Safety Study of the development. Construction of energy storage plant or equipment, other than of preliminary works, must not commence until approval has been given by the Planning Secretary. The study must:
 - (a) address the relevant aspects of the Department's *Hazardous Industry Planning Advisory Paper No. 2, 'Fire Safety Study'* guideline;
 - (b) address the New South Wales Government's *Best Practice Guidelines for Contaminated Water Retention and Treatment Systems*; and
 - (c) describe the final design of any energy storage plant or equipment to be constructed and verify the analysis performed in the *Appendix G – Hazards and Risks* of the Environmental Impact Statement. Any significant design variations between the final design and the designs considered in *Appendix G* must be identified and analysed in accordance with the Department's *Hazardous Industry Planning Advisory Paper No. 6, 'Hazard Analysis'*.

Storage and Handling of Hazardous Materials

2. The Applicant must store and handle all chemicals, fuels and oils used on-site in accordance with:

- (a) the requirements of all relevant Australian Standards; and
- (b) the NSW EPA's *Storing and Handling of Liquids: Environmental Protection – Participants Handbook* if the chemicals are liquids.

In the event of an inconsistency between the requirements listed from (a) to (b) above, the most stringent requirement must prevail to the extent of the inconsistency.

Emergency Plan

3. Prior to commissioning of the development, the Applicant must develop and implement a comprehensive Emergency Plan and detailed emergency procedures for the development. The Applicant must keep two copies of the plan on-site in a prominent position adjacent to the site entry points at all times. The plan must:
 - (a) be consistent with the Department of Planning's *Hazardous Industry Planning Advisory Paper No. 1, 'Emergency Planning'*;
 - (b) be prepared in consultation with Fire and Rescue NSW and NSW Rural Fire Service to their satisfaction;
 - (c) identify the fire risks and controls of the development; and
 - (d) include procedures that would be implemented if there is a fire on-site or in the vicinity of the site.

Thanks.

Regards,

Nicholas Hon

Technical Specialist (Hazards)
NSW Department of Planning & Environment
Level 29, 320 Pitt Street
Sydney NSW 2000 Australia
T (02) 9274 6344 E nicholas.hon@planning.nsw.gov.au



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Environment