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Contact: Station Officer Aaron Ross

25 February 2022

Elisha Dunn
NSW Department of Planning, Industry and Environment
Locked Bag 5022
PARRAMATTA NSW 5022

Dear Elisha Dunn.

Re: Advice on Modification Report - Nevertire Solar Farm - Modification 4 to add a Battery Energy Storage System (SSD-8072-Mod-4).

Fire and Rescue NSW (FRNSW) acknowledge correspondence received on the 16 February 2022, requesting Advice on Modification Report for Nevertire Solar Farm - Modification 4 to add a Battery Energy Storage System (SSD-8072-Mod-4).

FRNSW have reviewed the Modification Report along with Appendix G6 Preliminary Hazards Analysis (PHA) and make the following comments:

FRNSW note that the proposed Battery Energy Storage System (BESS) facility is subject to final design and is anticipated to have a capacity of 50MW and storage of 100MWh. Further, FRNSW note the remote location of the project site and it is our experience that water supplies for firefighting are challenging to source and access in these locations.

Due to the unique challenges of combating a BESS fire in a remote location FRNSW make the following recommendations:

- 1. To ensure that the fire prevention, detection, protection, and firefighting measures are appropriate to the specific fire hazards and adequate to meet the extent of potential fires, a comprehensive Fire Safety Study (FSS) is recommended to be undertaken.
- 2. That the FSS is developed in accordance with the requirements of Hazardous Industry Planning Advisory Paper No.2 (HIPAP No.2)ⁱ.
- That the FSS is required to be developed to the satisfaction of the operational requirements of FRNSW. FRNSW recommend that the development of a FSS be a condition of consent.
- 4. That the development of the FSS considers the operational capability of local fire agencies and the need for the facility to achieve an adequate level of on-site fire and life safety independence.

Fire and Rescue NSW ABN 12 593 473 110

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FRNSW note that the facility is to be unmanned and there would be no permanent dedicated operational personnel. To ensure first responders have ready access to information which enables effective hazard control measures to be quickly implemented FRNSW make the following recommendations:

- 5. That an Emergency Response Plan (ERP) be developed to specifically address foreseeable on-site and off-site fire events and other emergency incidents, (e.g. fires involving solar panel arrays or the BESS, bushfires in the immediate vicinity or potential hazmat incidents).
- 6. That the ERP detail the appropriate risk control measures that would need to be implemented in order to safely mitigate potential risks to the health and safety of firefighters and other first responders (including electrical hazards). Such measures would include the level of personal protective clothing required to be worn, the minimum level of respiratory protection required, decontamination procedures, minimum evacuation zone distances and a safe method of shutting down and isolating the photovoltaic system or BESS (either in its entirety or partially, as determined by risk assessment).
- 7. Other risk control measures that may need to be implemented in a fire emergency due to any unique hazards specific to the site should also be included in the ERP.
- 8. That two copies of the ERP are stored in a prominent 'Emergency Information Cabinet' which is located in a position directly adjacent to the site's main entry point/s.
- 9. That an Emergency Services Information Package is to be developed as detailed in FRNSW guideline Emergency Services Information Package and Tactical Fire Plansⁱⁱ for use by responding firefighters. It is to be stored along with the ERP in an 'Emergency Information Cabinet' which is located in a position directly adjacent to the site's main entry point/s.

For further information please contact the Operational Liaison and Special Hazards Unit, referencing FRNSW file number BFS22/182. Please ensure that all correspondence in relation to this matter is submitted electronically to firesafety@fire.nsw.gov.au.

Yours sincerely,

Superintendent John Hawes Manager

Operational Liaison Special Hazards Unit

Cc: elisha.dunn@dpie.nsw.gov.au

¹ https://www.planning.nsw.gov.au/-/media/Files/DPE/Guidelines/fire-safety-study-guidelines-2011-01.pdf?la=en

https://www.fire.nsw.gov.au/gallery/files/pdf/guidelines/guidelines_ESIP_and_TFP.pdf