Our Ref: ID 3867
Your Ref: SSD-48160216

17 June 2026

Kate Tierney
Department of Planning, Housing and Infrastructure
Locked Bag 5022
Parramatta NSW 2124

Via email

email: kate.tierney@dpie.nsw.gov.au
CC: lisa.ignatavicius1@ses.nsw.gov.au

Dear Kate,

State Significant Development Application for Maison Dieu Solar Farm (RtS)

Thank you for the opportunity to provide advice on the Response to Submissions (RtS) for the State Significant Development Application for Maison Dieu Solar Farm located on a site approximately 10km north-west of Singleton within the Hunter-Central Coast renewable energy zone (REZ). It is understood that the proposed development;

- seeks to construct, operate and decommission a large-scale solar farm with an integrated Battery Energy Storage System, a high-voltage electricity substation, connection to the national electricity grid through the existing Ausgrid Substation, and associated infrastructure.
- project capacity is 60 MW AC from approximately 110,000 solar panels. The BESS will have storage capacity of 40 MW / 80 MWh.
- project area includes parts of five lots, making a total of 203 hectares of land.
- expects up to 150 full time jobs will be supported during the 18-month construction phase and five full time jobs during the anticipated 30 years of operation.

We have reviewed the following documents provided as part of the preparation of our advice.

- Premise Australia, 2026. Response to Submissions report
- Riskcon, 2024. Preliminary Hazard Analysis Maison Dieu Solar Farm
- Intersect Traffic, 2025. Traffic Impact Assessment Maison Dieu Solar Farm
- Northrop, 2024. Flooding Assessment for Maison Dieu Solar Farm
- EMM, 2022. Maison Dieu Solar Farm Scoping Report

The NSW State Emergency Service (NSW SES) is the agency responsible for dealing with floods, storms and tsunami in NSW. This role includes planning for, responding to and coordinating the initial recovery from floods. As such, the NSW SES has an interest in the public safety

aspects of the development of flood prone land, particularly the potential for changes to land use to either exacerbate existing flood risk or create new flood risk for communities in NSW.

The NSW SES **has not** provided any advice for the previous stages of the State Significant Development Application for Maison Dieu Solar Farm.

We recommend flooding issues are considered in accordance with the requirements of NSW Government's Flood Prone Land Policy as set out in the Flood Risk Management Manual 2023 (the Manual) and supporting guidelines, including the Support for Emergency Management Planning and relevant planning circulars and directions under the *Environmental Planning and Assessment Act, 1979*, including 4.1 Flooding and Planning Circular PS 26-001 Flooding and land use planning.

The Hunter River is located to the east of the site. Parts of the Site may be on land that is prone to Hunter River and local flooding.[1] While the current design addresses the 1% AEP event, it does not adequately consider the full range of risks up to and including the PMF.

In summary, NSW SES:

- **Recommend** requesting further information regarding flood and isolation risks up to and including the PMF.[2] There is a risk of inundation, structural damage, and safety hazards during extreme flood events. The site lies within the Hunter River floodplain and is intersected by a floodway. Additionally, several unnamed 1st–4th order watercourses traverse the site, discharging into the Hunter River. These features contribute to a complex flood behaviour, with the potential for concentrated flows and elevated flood impacts.[3]
- **Recommend** seeking consideration of alternative flood mitigation measures such as elevating and/or relocating critical infrastructure[4], as the current proposal relies heavily on early evacuation, site closure, and provision of food and water in the event of isolation.
- **Recommend** requesting the emergency response strategy is updated, as the available details appear incomplete and insufficiently clear. Evacuation arrangements must ensure that occupants are not required, under any circumstances, to drive or walk through floodwaters. The proposed evacuation strategy is constrained by reliance on a single access route (Maison Dieu Road), which is itself susceptible to flooding.
- **Recommend** the definition and application of freeboard is reviewed within the EIS, as it is incorrect and therefore inadequate. The Flooding Assessment (EIS Appendix L) identifies floor levels set at 1% AEP + 500 mm freeboard, described as "distance from the waterline." This definition is technically incorrect as freeboard should reflect a

[1] BMT, 2023. Singleton Flood Risk Management Study and Plan
[2] Riskcon, 2024. Preliminary Hazard Analysis Maison Dieu Solar Farm
[3] EMM, 2022. Maison Dieu Solar Farm Scoping Report page 10
[4] EMM, 2022. Maison Dieu Solar Farm Scoping Report pages 2, 3, 4, 7, 8, 10.

vertical buffer above design flood level, accounting for flood modelling uncertainty, wave action, and hydraulic behaviour.[5]

You may also find the following Guidelines on the NSW SES website useful:

- Reducing Vulnerability of Buildings to Flood Damage
- Designing Safer Subdivisions
- Managing Flood Risk Through Planning Opportunities

Please feel free to contact Gillian Webber via email at rra@ses.nsw.gov.au should you wish to discuss any of the matters raised in this correspondence. The NSW SES would also be interested in receiving future correspondence regarding the outcome of this referral via this email address.

Yours sincerely,

Peter Cinque
Senior Manager, Emergency Risk Management
NSW State Emergency Service

[5] Premise Australia, 2026. Response to Submissions report page 23

ATTACHMENT A: Principles Outlined in the Support for Emergency Management Planning Guideline[6]

Principle 1 Any proposed Emergency Management strategy should be compatible with any existing community Emergency Management strategy.

Any proposed Emergency Management strategy for an area should be compatible with the strategies identified in the NSW State Flood Plan[7] and the Singleton LGA Flood Emergency Sub Plan[8] where evacuation is the preferred emergency management strategy for people impacted by flooding.

Recommend consideration of the risks of prolonged flooding, as historical events often have longer time of isolation than design events due to them often being caused by east coast lows that can last several days.

The flood evacuation constraints in an area must not be used as a reason to justify new development by requiring the new development to have a suitable refuge above the PMF. Allowing such development will increase the number of people exposed to the effects of flooding and other secondary emergencies such as fires and medical emergencies. Similar risks exist for isolation more broadly, requiring the response of Ambulance NSW, NSW SES, NSW Police Force, or NSW Fire and Rescue.

There is no known safe period of isolation, however, the longer the period of isolation, the more chance there is for mishap requiring external intervention. Even relatively brief periods of isolation, in the order of a few hours, can lead to personal medical emergencies that have to be responded to. During flooding it is likely that there will be a reduced capacity for the relevant emergency service agency to respond in these times.

NSW SES do not support a shelter-in-place strategy being used for *future development.* We also recommend referring to the considerations in the Shelter in Place Guideline (2024) and considering the nature of flooding at the site in relation to the subject site, including noting that shelter in place for greenfield development is not supported (point 4).[9]

Principle 2 Decisions should be informed by understanding the full range of risks to the community.

Decisions relating to future development should be risk-based and ensure Emergency Management risks to the community of the full range of floods are effectively understood and managed.

Further, risk assessment should consider the full range of flooding, including events up to the Probable Maximum Flood (PMF) and not focus only on the 1% AEP flood. Climate change should also be considered.

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[6] NSW Government. 2023. Principles Outlined in the Support for Emergency Management Planning Guideline
[7] NSW Government. 2024. NSW State Flood Plan. Section 5.1.7, page 34
[8] NSW State Emergency Service, 2023. Singleton LGA Flood Emergency Sub Plan page 7
[9] Northrop, 2024. Flooding Assessment for Maison Dieu Solar Farm page 31

Site users will need to evacuate before evacuation routes get cut. Please note that flooding impacts along any proposed evacuation route, which is a single road in Maison Dieu Road, must be assessed to understand if it enables safe evacuation. Evacuation must not require people to drive or walk through flood water. The site is serviced by a single access road (no through access), which is vulnerable to flooding and may become impassable during flood events.

The NSW SES recommend further assessment is needed for transport to site and installation of equipment for the development for the Maison Dieu Solar Farm project should also include the impact of flooding on access and isolation during and after the project. Any proposed plan should outline mitigation measures to manage traffic and transport impacts.

Principle 3 Development of the floodplain does not impact on the ability of the existing community to safely and effectively respond to a flood.

The ability of the existing community to effectively respond (including self-evacuating) within the available timeframe on available infrastructure is to be maintained. It is not to be impacted on by the cumulative impact of new development.

Risk assessment should have regard to flood warning and evacuation demand on existing and future access/egress routes. Consideration should also be given to the impacts of localised flooding on evacuation routes. Evacuation must not require people to drive or walk through flood water.

Development strategies relying on an assumption that mass rescue may be possible where evacuation either fails or is not implemented are not acceptable to the NSW SES.

Principle 4 Decisions on development within the floodplain does not increase risk to life from flooding.

Managing flood risks associated with flooding requires careful consideration of development type, likely users, and their ability respond to minimise their risks. This includes consideration of:

- Isolation – There is no known safe period of isolation in a flood, the longer the period of isolation the greater the risk to occupants who are isolated.
- Secondary risks – This includes fire and medical emergencies that can impact on the safety of people isolated by floodwater. The potential risk to occupants needs to be considered and managed in decision-making.
- Consideration of human behaviour – The behaviour of individuals such as choosing not to remain isolated from their family or social network in a building on a floor above the PMF for an extended flood duration or attempting to return to a building during a flood, needs to be considered.

Principle 5 Risks faced by the itinerant population need to be managed.

Any Emergency Management strategy needs to consider people visiting the area or using a development.

Principle 6 Recognise the need for effective flood warning and associated limitations.

An effective flood warning strategy with clear and concise messaging understood by the community is key to providing the community an opportunity to respond to a flood threat in an appropriate and timely manner.

Principle 7 Ongoing community awareness of flooding is critical to assist effective emergency response.

Development within a floodplain will necessitate ongoing involvement from the NSW SES in community awareness, preparedness, and response activities.

It is essential that all site users, both during and after the construction phase, are informed of the flood risk and the measures in place to reduce risk to life. This includes:

- Raising awareness of flood risk
- Promoting preparedness actions
- Installing appropriate signage
- Conducting emergency drills