

Our Ref: ID 3634
Your Ref: SSD-38358962

3 February 2026

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Via Major Portal

email: emmarose.cooper@dpie.nsw.gov.au
CC: joshua.stanbury@ses.nsw.gov.au

Dear Emma,

State Significant Development Application for Keri Keri Wind Farm (RTS)

Thank you for the opportunity to provide advice on the State Significant Development Application for Keri Keri Wind Farm, located in Keri Keri approximately 30 km southeast of Balranald and 75 km southwest of Hay in the Murray River LGA and extending over an area of approximately 18,006 hectares. It is understood that the proposed development will deliver approximately 650 full time equivalent jobs during construction and 12 during operation and comprises the construction, operation and decommissioning of a wind farm with up to 114 wind turbine generators (WTGs) including:

- Up to 114 WTGs.
- Three 33/330 kilovolt electrical substations.
- One switching station.
- A lithium-ion battery storage system (BESS).
- Underground and overhead 33kV electrical reticulation and fibre optic cabling connecting the WTGs to the onsite substations.
- A 330kV overhead transmission line.
- Two site access points and internal road network.
- One operations and maintenance facility.
- Commissioning of four permanent meteorological monitoring masts for power testing.
- Decommissioning of four temporary masts.
- Upgrades of external roads and intersections to facilitate transport and delivery of WTG components and associated infrastructure.
- Other ancillary infrastructure including security huts and biosecurity wash bays.
- Temporary facilities such as concrete batching plants, hardstands and laydown areas, construction compounds and workers accommodation.

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

- ERM, 2026, Amendment Report
- BMT, 2025, Keri Keri Wind Farm Flood Assessment Addendum
- BMT, 2024, Flood Assessment

The NSW State Emergency Service (NSW SES) is the agency responsible for dealing with floods, storms and tsunamis 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.

We note the proposal has considered flooding issues 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 PS24-001.

In summary, we:

- Recommend **pursuing site design and stormwater management that reduces the impact of flooding and minimises any risk to the community, including during the proposed upgrades to external intersections.** Any improvements to flood resilience that can be made to reduce flood risk will benefit the community. This includes the proposed mitigation measures, but also the provision of rising road access/egress away from the flooding where feasible.
- Recommend considering the impacts of climate change. It is estimated that the actual probability of a 1 in 100 AEP for this catchment area is approximately a 1 in 68 AEP event for the current scenario.¹ For the proposed development site, **this could result in more frequent isolation than what is currently expected** based on previous modelling.
- **Support the proposed emergency management strategy** of closing and evacuating the site in the event of local warnings for potential flooding² aligns with the strategies identified in the Murray River Council Flood Emergency Sub Plan and reduces risk to life.

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](#)

¹ WMAwater. 2025. Climate Change Calculator. Retrieved 23 January 2026 from <https://ccc.wmawater.com.au/>

² BMT, 2025, Keri Keri Wind Farm Flood Assessment Addendum, Section 4.4 Emergency Management, Page 25

Please feel free to contact Kate Dawes 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,

A handwritten signature in grey ink, appearing to read 'P. Cinque'.

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

ATTACHMENT A: Principles Outlined in the Support for Emergency Management Planning Guideline³

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 Plan⁴ and the Murray River Council Flood Emergency Sub Plan, where evacuation is the preferred emergency management strategy for people impacted by flooding.⁵

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.

It is noted that the site itself is bounded by Abercrombie Creek to the south and is affected by breakout flooding from the Murrumbidgee River system. The site is affected by flooding as frequently as the 5% Annual Exceedance Probability (AEP) event with several shallow flow paths crossing the site.⁶ During the Probable Maximum Flood (PMF) event the majority of the site becomes inundated becoming a Low Flood Island. The Flood Report Addendum states *“Proposed developments are subject to depths of 0.5-1m, and Hazard Category H3. Depths of 1-2m and Hazard Category H4 are estimated at some WTG locations”*

We support the strategy proposed in the Flood Assessment Addendum which states that *“In the event of a local warning advising of the potential for flooding it is recommended that the site is closed and evacuated.”*⁷ Low Flood Islands present a risk to life to anyone remaining on the site, pre-emptive site evacuation on receipt of flood warnings is a suitable strategy for managing the risk at this location.

³ NSW Government. 2023. Principles Outlined in the Support for Emergency Management Planning Guideline

⁴ NSW Government. 2024. NSW State Flood Plan. Section 5.1.7, page 34

⁵ NSW SES, Murray River Council Flood Emergency Sub Plan, Endorsed October 2023, Section 5.8

⁶ BMT, 2025, Keri Keri Wind Farm Flood Assessment Addendum, Figure B-1 Keri Keri Developed Case 5% AEP Peak Flood Depth and Level, Page 35

⁷ BMT, 2025, Keri Keri Wind Farm Flood Assessment Addendum, Section 4.4 Emergency Management, Page 25

We recommend pursuing site design and stormwater management that reduces the impact of flooding and minimises any risk to the community, including during the proposed upgrades to external intersections. Any improvements to flood resilience that can be made to reduce flood risk will benefit the community, particularly during the construction phase when the expected traffic to and from the site presents an increase in traffic on rural roads. This includes the proposed mitigation measures, but also the provision of rising road access/egress away from the flooding where feasible.

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 Low Flood Islands 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.

Current evidence suggests that flood events will become more frequent due to climate change. A Climate Change Calculator has been developed to address the updated ARR climate change guidelines, recommending the adjustment of the BoM 2016 IFDs to account for the warming that has occurred since the mid-point of the data used for their

development (1961-1990).⁸ This results in a significant increase in existing conditions flood levels.⁹

The change in flood probabilities with climate change for this catchment area results in the new probability of the 1 in 100 AEP to be approximately 1 in 68 AEP event for the current scenario, becoming even more frequent in the future.¹⁰ For the proposed development site, this could result in more frequent inundation and/or isolation than what is currently expected based on previous modelling.

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.

NSW SES utilises the Australian Warning System which is a nationally consistent, three-tiered approach to issue clear warnings and lead people to take action ahead of severe weather events. The three warning tiers consist of Advice, Watch and Act and Emergency Warning. These warnings can be viewed on the SES website and the HazardWatch website and app.

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
- Strengthening community connections
- Promoting preparedness actions
- Installing appropriate signage
- Conducting emergency drills

⁸ Wasko et al. 2024. A systematic review of climate change science relevant to Australian design flood estimation. *Hydrology and Earth System Sciences*. 28: 1251-1285

⁹ Babister et al. 2024. Climate Change Calculator: Estimating Changes to Flood Probability Under Different Climate Change Scenarios, page 1

¹⁰ WMAwater. 2025. Climate Change Calculator. Retrieved 23 January 2026 from <https://ccc.wmawater.com.au/>

Importantly, a private flood management plan is insufficient to address flood risk on this site.

Residents and users of the proposed development should be made aware of their flood risk and be encouraged to use available tools and resources, including:

- **Hazards Near Me app** – part of the Australian Warning System, providing timely flood warnings
- [NSW SES website](#) – offering comprehensive guidance on flood preparedness, response, and recovery, including multilingual resources
- [HazardWatch](#) – an interactive platform for accessing real-time flood information and warnings