



DOC23/681908-4

The Proper Officer
Planning and Assessment Division
Department of Planning, Industry and Environment
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Attention: Kurtis Wathen
Planning and Assessment Division

8 August 2023

Dear Kurtis

State Significant Development SSD 60598738
EPA Submission on Planning Advice Request - Lake Lyell Pumped Hydro Project, Lithgow

Thank you for the request for comment from Public Authority Consultation (PAE-60797964), requesting a review by the NSW Environment Protection Authority (EPA) of the scoping report for the proposed Lake Lyell Pumped Hydro Energy Storage facility within the City of Lithgow Local Government Area (SSD 60598738; the proposal).

The EPA has reviewed the following document:

- *Energy Australia Lake Lyell Pumped Hydro Energy Storage Project Scoping Report - Prepared for Energy Australia July 2023 (Version 7- Final).*

It is understood that EnergyAustralia NSW Pty Ltd (the Proponent) is investigating the development of the Lake Lyell Pumped Hydro Energy Storage (PHES) Scheme (the Project).

- the proposal is on land zoned as SP2 Electricity Generating Works, takes advantage of the existing infrastructure of Lake Lyell to continue to serve a specific purpose in electricity generation (consistent with its existing use associated with Mt Piper power station which will be decommissioned in the coming decades).
- the Project will consist of upper and lower water reservoirs, a pipeline connecting them, and a hydroelectric power station connected to the national energy grid that is capable of generating or consuming electricity.
- An Environmental Impact Statement (EIS) is yet to be prepared for this proposal.

Based on the information provided, the proposal will require an Environment Protection Licence (EPL) for Electricity generation Activities under Schedule 1 of the *Protection of the Environment Operations Act 1997* (POEO Act). General information on licence requirements can be obtained from the EPA's Environment Line by calling 131 555 or on the EPA's website at www.epa.nsw.gov.au/licensing/licencePOEO.htm

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In addition, as a requirement of the EPL, the EPA will require the Proponent to prepare, test and implement a Pollution Incident Response Management Plan and/or Plans in accordance with Section 153A of the Act.

The Proponent should be made aware that, consistent with provisions under Part 9.4 of the POEO Act, the EPA may require the provision of financial assurance and/or assurances. The amount and form of the assurance(s) would be determined by the EPA and required as a condition of an EPL.

Notwithstanding the above key assessment requirements, the EIS must include an environmental risk analysis to identify potential environmental impacts associated with the project (construction and operation), proposed mitigation measures and potentially significant residual environmental impacts after the application of proposed mitigation measures. Where additional key environmental impacts are identified through this environmental risk analysis, an appropriately detailed impact assessment of this additional key environmental impact must be included in the EIS.

The EPA has considered the proposal and has identified specific issues that the EPA considers critical to an assessment of the proposed development, including water and wastewater management, air quality management, waste management, and noise, and has identified the information it requires for these issues as contained in **Attachment A**.

If you have any questions regarding this matter, please contact Mrs Samantha Hayes on (02) 6333 3806 or via e-mail at info@epa.nsw.gov.au.

Yours sincerely



FRED HENNESSY
Unit Head
Regulatory Operations Regional

ATTACHMENT A:
Information required for the Lake Lyell Pump Hydro proposal

1. Licencing requirements:

Proposal:

EnergyAustralia NSW Pty Ltd (EnergyAustralia) is investigating the development of the Lake Lyell Pumped Hydro Energy Storage Scheme (the Project), it is anticipated to provide between 300 and 350 megawatts (MW) of electricity generating capacity for up to 8 hours during peak demand. At a basic level, it will consist of upper and lower water reservoirs, a pipeline connecting them, and a hydroelectric power station connected to the national energy grid that is capable of generating or consuming electricity.

Comments:

Based on the information provided, the proposal will require an Environment Protection Licence (EPL) for Electricity generation Activities under Schedule 1 of the *Protection of the Environment Operations Act 1997* (POEO Act).

An Environment Protection Licence (EPL) will be required for the applicable scheduled activities during construction and an EPL for operation for electricity generation. Certain construction activities would be determined during the development of the detailed design and construction methodology but are expected to include concrete works, crushing, grinding or separating, road construction and waste disposal.

The Proponent should be made aware that any commitments made in the EIS may be formalised as approval conditions and may also be placed as formal licence conditions in an EPL.

Recommendation:

The development is a scheduled activity under *the Protection of the Environment Operations Act 1997* (POEO Act) and will therefore require an Environmental protection Licence if approval is granted.

Should project approval be granted, the proponent will need to make an application to the EPA for its EPL for the proposed facility prior to undertaking any on site works. Additional information is available through the EPA Guide to Licensing document www.epa.nsw.gov.au/licensing/licenceguide.htm.

2. Environmental impact statement of the project

The Environmental Assessment (EA) must address the requirements of Section 45 of the Protection of the *Environment Operations Act 1997* (POEO Act) by determining the extent of each impact and providing sufficient information to enable the EPA to determine appropriate conditions, limits and monitoring requirements for an Environment Protection Licence (EPL)

Impacts related to the following environmental issues need to be assessed, quantified and reported on:

- Air Issues: air quality, including dust and odour generation from the operation on the surrounding landscape and/or community.
- Noise and vibration impacts associated with blasting (if applicable) and operational noise, particularly machinery, including cooling systems for the sheds and plant movements.
- Waste, including hazardous materials and radiation. Consideration needs to be given to disposal options for general waste, sanitary waste, hazardous materials, and radiation, where relevant.
- Water and Soils, including site water balance and sediment and erosion controls during construction and operation phases.

SPECIFIC ISSUES

3. Air issues

The EA must demonstrate the proposal's ability to comply with the relevant regulatory framework, specifically *the Protection of the Environment Operations Act 1997* (POEO) and the POEO (Clean Air) Regulation (2002).

The EA must include an air quality impact assessment (AQIA).

The AQIA must be carried out in accordance with the document, Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (2005)

<http://www.epa.nsw.gov.au/resources/air/ammodelling05361.pdf>.

4. Noise and Vibration

The EA must assess the following noise and vibration aspects of the proposed development.

Construction noise associated with the proposed development should be assessed using the Interim Construction Noise Guideline (DECC, 2009). These are available at:

<https://www.epa.nsw.gov.au/your-environment/noise/industrial-noise/interim-construction-noise-guideline>

Vibration from all activities (including construction and operation) to be undertaken on the premises should be assessed using the guidelines contained in the Assessing Vibration: a technical guideline (DEC, 2006). These are available at: <https://www.epa.nsw.gov.au/your-environment/noise/industrial-noise/assessing-vibratio>

If blasting is required for any reason during the construction or operational stage of the proposed development, blast impacts should be demonstrated to be capable of complying with the guidelines contained in the Australian and New Zealand Environment Council – Technical basis for guidelines to minimise annoyance due to blasting overpressure and ground vibration (ANZEC, 1990). These are available at: <https://www.epa.nsw.gov.au/your-environment/noise/industrial-noise/interim-construction-noise-guideline>.

Operational noise from all industrial activities (including private haul roads and private railway lines) to be undertaken on the premises should be assessed using the guidelines contained in the NSW Noise Policy for Industry (EPA, 2017). [https://www.epa.nsw.gov.au/your-environment/noise/industrial-noise/noise-policy-for-industry-\(2017\)](https://www.epa.nsw.gov.au/your-environment/noise/industrial-noise/noise-policy-for-industry-(2017))

Noise on public roads from increased road traffic generated by land use developments should be assessed using the guidelines contained in the NSW Road Noise Policy and associated application notes (EPA, 2011). <https://www.epa.nsw.gov.au/your-environment/noise/transport-nois>.

5. Waste, chemicals and hazardous materials and radiation

The EA must assess all aspects of waste generation, management and disposal associated with the proposed development.

The EA must demonstrate compliance with all regulatory requirements outlined in the POEO Act and associated waste regulations.

5.3. The EA must identify, characterise and classify the following in accordance with the EPA's Waste Classification Guidelines (2014) and associated addendums:

- i. all waste that will be generated onsite through excavation, demolition or construction activities, including proposed quantities of the waste;
- ii. all waste that is proposed to be disposed of to an offsite location, including proposed quantities of the waste and the disposal locations for the waste. This includes waste that is intended for reuse or recycling.

Note: The EPA's Waste Classification Guidelines (2014) and associated addendums are available at: <https://www.epa.nsw.gov.au/your-environment/waste/classifying-waste>

6. Water

The EA must demonstrate how the proposed development will meet the requirements of section 120 of the POEO Act.

The EA must describe how stormwater will be managed in all phases of the project, including details of how stormwater and runoff will be managed to minimise pollution. Information should include measures to be implemented to minimise erosion, leachate and sediment mobilisation at the site. The EA should consider the guidelines Managing urban stormwater: soils and Construction, vol. 1 (Landcom 2004) and vol. 2 (A. Installation of services; C. Unsealed roads; D. Main Roads; E. Mines and quarries) (DECC, 2008).

The EA must describe any water quality monitoring programs to be carried out at the project site. Water quality monitoring should be undertaken in accordance with the Approved Methods for the Sampling and Analysis of Water Pollutant in NSW (2004), which is available at:

<http://www.epa.nsw.gov.au/resources/legislation/approvedmethods-water.pdf>

Erosion, sediment control measures to be implemented to minimise erosion, and sediment mobilisation at the site during the construction and operation phases of the project. The EA should show the location of each measure to be implemented. Include such control measures such as:

- Sediment traps
- Diversion banks
- Sediment fences
- Bunds (earth, hay, mulch)
- Geofabric liners
- Other control measures as appropriate.