

# Planning Secretary's Environmental Assessment Requirements

## Section 5.16 of the *Environmental Planning and Assessment Act 1979*

<b>Application Number</b>	SSI-77018220
<b>Project Name</b>	Lake Lyell Pumped Hydro Energy Storage project, which includes a 440 megawatt pumped hydro power station, upper and lower reservoirs, grid connection and ancillary infrastructure.
<b>Location</b>	5 km west of Lithgow within the Lithgow local government area.
<b>Applicant</b>	Lake Lyell Project Pty Ltd
<b>Date of Issue</b>	17/11/2025
<b>General Requirements</b>	<p>The Environmental Impact Statement (EIS) must meet the minimum form and content requirements as prescribed by Part 8 of the <i>Environmental Planning and Assessment Regulation 2021</i> (the Regulation) and must have regard to the <i>State Significant Infrastructure Guidelines</i>.</p> <p>In particular, the EIS must include:</p> <ul style="list-style-type: none"><li>• a stand-alone executive summary;</li><li>• a summary of the background to the project, including the alternatives that were considered to the project;</li><li>• a full description of the project accompanied by suitable maps and plans, including the:<ul style="list-style-type: none"><li>○ disturbance area;</li><li>○ physical layout of the project over time, including sections of key components;</li><li>○ all infrastructure and facilities, such as substations, transmission lines, battery energy storage system, construction compounds, concrete batching plants, internal access roads, and road upgrades (including any infrastructure that would be required for the development, but the subject of a separate approvals process);</li><li>○ key uses and activities to be carried out on site;</li><li>○ likely timing of the project including any stages, the key phases within each stage (site preparation, construction, commissioning, operation, decommissioning and rehabilitation) and the sequencing of these stages and phases;</li><li>○ the Project Area (as per Table 1 of the SSI guidelines – preparing an environmental impact statement) and Development Footprint (disturbance area including but not limited to areas for infrastructure, road works and access tracks);</li></ul></li><li>• consistency in information presented in the EIS and all technical reports including distances, development footprint, project design and infrastructure proposed, construction timeframes and receiver numbers;</li><li>• a strategic justification of the project focusing on site selection and the suitability of the proposed site with respect to potential land use conflicts with existing and future surrounding land uses (including existing land use, other proposed or approved solar and major projects, rural/residential development, Crown lands within and adjacent to the project site and subdivision potential) having regard to:<ul style="list-style-type: none"><li>○ State and Commonwealth legislation, policies and guidelines, and current initiatives to improve energy security and reliability in the National Electricity Market;</li><li>○ key features of the environment that could affect or be affected by the project (including any National Parks and Reserves);</li></ul></li></ul>

	<ul style="list-style-type: none"> <li>○ any other existing, approved or proposed projects that could result in cumulative impacts with the project;</li> <li>○ an analysis of the feasible alternatives to carrying out the project, considering its objectives, including the consequences of not carrying out the infrastructure;</li> <li>● the relevant statutory context for the project, including:             <ul style="list-style-type: none"> <li>○ the assessment pathway for the project under the <i>Environmental Planning and Assessment Act 1979</i>;</li> <li>○ the approvals required before the project may be carried out; and</li> <li>○ any relevant matters for consideration;</li> </ul> </li> <li>● a description of the engagement that was carried out during the preparation of the EIS, the key issues raised during this engagement and the proposed engagement strategy for the project if it is approved;</li> <li>● a risk assessment of the potential environmental impacts of the project, identifying the key issues for further assessment;</li> <li>● an assessment of the likely economic, social and environmental impacts of the project and any other significant issues identified in this risk assessment, having regard to the requirements in any relevant Government legislation, policies and guidelines (see below), including:             <ul style="list-style-type: none"> <li>○ a description of the existing environment including adequate baseline data;</li> <li>○ community views;</li> <li>○ measures to avoid, minimise and if necessary, offset predicted impacts, including detailed contingency plans for managing any significant risks to the environment, whether these measures are consistent with industry best practice, and represent the full range of reasonable and feasible mitigation measures that could be implemented and the likely effectiveness of these measures;</li> <li>○ a consolidated summary of all the proposed environmental management and monitoring measures, identifying all the commitments in the EIS;</li> <li>○ the predicted impacts of the project, including any cumulative impacts of the site and existing or proposed developments in the region taking into consideration any relevant legislation, environmental planning instruments, guidelines, policies, plans and industry codes of practice including <i>Cumulative Impact Assessment Guideline</i> (DPIE, 2021);</li> <li>○ actions proposed to deal with any uncertainties associated with the assessment;</li> </ul> </li> <li>● a detailed consideration of the capability of the project to the security and reliability of the electricity system in the National Electricity Market, having regard to local system conditions and the Department’s guidance on the matter</li> <li>● a detailed evaluation of the merits of the project as a whole.</li> </ul> <p><b>Estimated Development Cost and Employment</b></p> <ul style="list-style-type: none"> <li>● Provide the estimated cost (EDC) of the project prepared in accordance with the relevant planning circular using the Standard Form of EDC Report; and</li> <li>● Provide an estimate of the retained and new jobs that would be created during the construction and operational phases of the project, including details of the methodology to determine the figures provided.</li> </ul> <p>In addition, the EIS must also be accompanied by a declaration from a Registered Environmental Practitioner that the EIS includes the information specified in the Department’s <i>Registered Environmental Assessment Practitioner Guidelines</i> (DPE, 2022).</p>
<p><b>Key Issues</b></p>	<p>The level of assessment of key matters must be proportionate to the likely significance of the impacts on the matter.</p> <p>In particular, the EIS must include the following:</p> <p><b>Biodiversity</b> – including:</p>

- an assessment of the biodiversity impacts of the project on terrestrial, aquatic riparian and groundwater-dependent ecosystems (including listed threatened species and communities) and impacts to National Parks and Reserves (including Marrangaroo National Park), including an assessment of the biodiversity values and the likely biodiversity impacts of the project, in accordance the *Biodiversity Conservation Act 2016* (BC Act), the Biodiversity Assessment Method 2020 and documented in a Biodiversity Development Assessment Report (BDAR). The BDAR must:
    - be prepared using the approved BDAR template;
    - document the application of the avoid, minimise and offset framework including assessing all direct, indirect and prescribed impacts in accordance with the BAM;
    - assess the impacts associated with all ancillary infrastructure, including the transport route road upgrades;
    - include an assessment for SAIL in accordance with Section 9.1 of the BAM
    - an assessment of the likely impacts on listed aquatic threatened species, populations or ecological communities, scheduled under the *Fisheries Management Act 1994*, and a description of the measures to minimise and rehabilitate impacts, including impacts to Lake Lyell, Coxs River and Farmers Creek;
    - a cumulative impact assessment of biodiversity values in the region from nearby developments; and
    - if an offset is required, details of any strategy to offset any residual impacts of the project in accordance with the BC Act.
- Heritage** – including:
- an assessment of the impact to Aboriginal cultural heritage items (archaeological and cultural), in accordance with the *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW* (OEH, 2011) and the *Code of Practice for the Archaeological Investigation of Aboriginal Objects in NSW* (DECCW, 2010) including results of archaeological test excavations (if required);
  - provide evidence of consultation with Aboriginal communities in determining and assessing impacts, developing options and selecting options and mitigation measures (including the final proposed measures), having regard to the *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (DECCW, 2010); and
  - an assessment of the impact to historic heritage prepared by a suitably qualified heritage consultant in accordance with the *Guidelines for preparing a statement of heritage impact* (DPE 2023).
- Water and Soils** – including:
- a detailed site water balance for the project, including the water take from each surface and ground water source, any licensing requirements, and determine whether an adequate and secure water supply is available for the project;
  - a detailed description of the proposed water management system, water monitoring program, erosion and sediment control measures, and other measures to mitigate surface water and groundwater impacts;
  - an assessment of the impacts of the project on:
    - the water catchment and quantity and quality of local and regional surface water and ground water;
    - resources, including Lake Lyell, Coxs River and Farmers Creek;
    - water security for local downstream receivers including other dependent water industries;
    - hydrological flows on site, including any potential flooding impacts;
    - key water features on site, including potential impacts on riparian land;
    - type and extent of any dredging or reclamation activities within ‘water land’;

	<ul style="list-style-type: none"> <li>○ water-related infrastructure, basic landholder rights and the entitlements of water users;</li> <li>○ a description of the likely changes to the hydrological regime of the Lake Lyell, Coxs River and Farmers Creek, and any associated biodiversity impacts;</li> <li>○ where the project involves works within 40 metres of the high bank of any river, lake or wetlands (collectively waterfront land), identify likely impacts to the waterfront land, and how the activities are to be designed and implemented in accordance with the <i>DPI Guidelines for Controlled Activities on Waterfront Land</i> (2018) and (if necessary) <i>Why Do Fish Need to Cross the Road? Fish Passage Requirements for Waterway Crossings</i> (DPI 2003); and <i>Policy &amp; Guidelines for Fish Habitat Conservation &amp; Management</i> (DPI, 2013);</li> <li>○ a strategy to manage spoil and enhance any new landforms created; and</li> <li>○ a description of the erosion and sediment control measures that would be implemented to mitigate any impacts in accordance with <i>Managing Urban Stormwater: Soils &amp; Construction</i> (Landcom 2004).</li> <li>● an assessment of the impacts of the project must: <ul style="list-style-type: none"> <li>○ identify, assess and describe any potential risks relating to all known and potential contaminants of concern (CoC) including nitrate that may be associated with any proposed blasting; and</li> <li>○ describe mitigation and management options that will be used to prevent identified soil and water impacts associated with blasting. This should include an assessment of the effectiveness and reliability of the measures and any residual impacts after these measures are implemented and any associated impacts of these measures.</li> </ul> </li> </ul> <p><b>Land</b> – including:</p> <ul style="list-style-type: none"> <li>● an assessment of impacts of the project on: <ul style="list-style-type: none"> <li>○ the impact of the project on the Marrangaroo National Park in accordance with the <i>National Parks and Wildlife Act 1974</i> and the guidelines for <i>Development adjacent to National Parks and Wildlife Services Lands</i> (DPIE, 2020);</li> <li>○ soils including potential impacts associated with the spoil generated by the project, the use of hydrocarbons and chemicals and a soil survey to determine the soil characteristics and consider the potential for erosion to occur;</li> <li>○ the topography of the site, including the creation of any new landforms;</li> <li>○ the geotechnical stability of the site;</li> <li>○ consideration of agricultural land, Crown lands, flood prone land, irrigated lands, travelling stock routes, public recreation, mining, quarries mineral or petroleum rights;</li> <li>○ completion of a Land Use Conflict Risk Assessment in accordance with the Department of Industry's <i>Land Use Conflict Risk Assessment Guide</i>; and</li> <li>○ a strategy to manage the progressive rehabilitation of the land disturbed by the project and enhance any new landforms created and describe the revised rehabilitation objectives and rehabilitation completion criteria to be achieved in relation to any retained infrastructure and / or disturbance areas to be utilised by the project.</li> </ul> </li> </ul> <p><b>Transport</b> – including:</p> <ul style="list-style-type: none"> <li>● an assessment of the peak and average traffic generation, including over-dimensional vehicles / heavy vehicles requiring escort and construction worker transportation;</li> <li>● an assessment of the likely transport impacts to the site access route(s) including for over-dimension vehicles, site access point(s), any Crown land, particularly in relation to the capacity and condition of the roads, road safety and intersection performance;</li> <li>● a cumulative impact assessment of traffic from nearby developments; and</li> </ul>
--	--

- provide details of measures to mitigate and / or manage potential impacts including a schedule of all required road upgrades (including resulting from heavy vehicle and over mass / over dimensional traffic haulage routes), clear figures of proposed road upgrades (including the site access points) road maintenance contributions, and any other traffic control measures, developed in consultation with the relevant road authority; and
  - Details of ongoing maintenance works required to service assets, outlining the measures to maintain the road.
- Amenity** – including:
- an assessment of the:
    - construction, operational and road noise impacts of the project in accordance with the *Interim Construction Noise Guideline*, *Noise Policy for Industry* and the *Road Noise Policy* respectively;
    - vibration and blasting impacts of the project;
    - detailed assessment of the likely visual impacts of all components of the project, including lighting impacts and potential impacts on views of the project from residences, key vantage points and recreational areas surrounding Lake Lyell;
    - amenity impacts on National Parks and Reserves (including Marrangaroo National Park); and
    - details of measures to mitigate and/or manage potential impacts.
- Air quality and greenhouse gases** – including:
- an assessment of the proposal’s ability to comply with the relevant regulatory framework, specifically the POEO Act and the *Protection of the Environment Operations (Clean Air) Regulation 2022*;
  - an assessment of emission control techniques/practices that will be employed at the site and identify how the proposed control techniques/practices will meet the requirements of the POEO Act, POEO (Clean Air) Regulation and associated air quality limits or guideline criteria; and
  - an assessment of the likely greenhouse gas impacts of the project including measures to minimise emissions, having regard to the targets set in the *Climate Change (Net Zero Future) Act 2023*, and in accordance with the EPA’s *NSW Guide for Large Emitters* if required if emissions trigger the threshold as a large emitter.
- Hazards** – including:
- an assessment of:
    - any potentially hazardous impacts of the project; and
    - any public safety risks, including bushfire and flooding risks (including potential impacts on National Parks and Reserves (including Marrangaroo National Park), State Forests and Conservation Areas and downstream landholdings) and consideration of Dam Safety Committee Guidance;
    - where there are dangerous goods and hazardous materials associated with the project provide a preliminary risk screening in accordance with *State Environmental Planning Policy (Resilience and Hazards) 2021*;
    - where required by the State Environmental Planning Policy (Resilience and Hazards), provide a Preliminary Hazard Analysis (PHA) prepared in accordance with *Hazardous Industry Planning Advisory Paper No.6 – Guidelines for Hazard Analysis* (DoP, 2011) and *Multi-Level Risk Assessment* (DoP, 2011); and
    - an assessment of potential hazards and risks including but not limited to fires, spontaneous ignition, electromagnetic fields or the proposed grid connection infrastructure against the International Commission on Non-ionizing Radiation Protection (ICNIRP) *Guidelines for limiting exposure to Time-varying Electric, Magnetic and Electromagnetic Fields*.

	<ul style="list-style-type: none"> <li>○ a preliminary investigation into potential contamination across the site, in accordance with the <i>State Environmental Planning Policy (Resilience and Hazards) 2021</i> (as required).</li> </ul> <p><b>Social</b> – including:</p> <ul style="list-style-type: none"> <li>• an assessment of the social impacts of the project in accordance with <i>Social Impact Assessment Guideline</i> (DPIE, 2023) and the SIA Guideline - Technical Supplement (DPIE, 2023) and consideration of construction workforce accommodation, including impacts on: <ul style="list-style-type: none"> <li>○ the locality;</li> <li>○ the demand for infrastructure and services in the Lithgow local government area, including consideration of construction workforce accommodation; and</li> <li>○ users of nearby National Parks and Reserves (including Marrangaroo National Park), Conservation Areas.</li> </ul> </li> </ul> <p><b>Economic and Benefit-Sharing</b> – including:</p> <ul style="list-style-type: none"> <li>• an assessment of the economic impacts and benefits of the project on the locality and the State as a whole and provide details of any proposed voluntary benefit-sharing programs; and</li> <li>• details of how the construction workforce will be managed to minimise local impacts, including a consideration of construction workforce accommodation.</li> </ul> <p><b>Waste</b> – including:</p> <ul style="list-style-type: none"> <li>• an assessment must identify, quantify and classify the likely waste streams to be generated during construction and operation, and describe the measures to be implemented to manage, reuse, recycle and safely dispose of this waste and an assessment of sewage (if required), taking into consideration capacity and availability of local landfills.</li> </ul>
<b>Plans and Documents</b>	<p>The EIS must include all relevant plans, diagrams and relevant documentation required under Part 3 of the EP&amp;A Regulation. Provide these as part of the EIS rather than as separate documents.</p> <p>In addition, the EIS must include high quality files of maps and figures of the subject site and proposal.</p>
<b>Legislation, Policies &amp; Guidelines</b>	<p>The assessment of the key issues listed above must take into account relevant guidelines, policies, and plans as identified.</p> <p>A list of some of the legislation, policies and guidelines that may be relevant to the assessment of the project can be found at:</p> <ul style="list-style-type: none"> <li>• <a href="https://www.planning.nsw.gov.au/Policy-and-Legislation/Planning-reforms/Rapid-Assessment-Framework/Improving-assessment-guidance">https://www.planning.nsw.gov.au/Policy-and-Legislation/Planning-reforms/Rapid-Assessment-Framework/Improving-assessment-guidance</a></li> <li>• <a href="https://www.planningportal.nsw.gov.au/major-projects/assessment/policies-and-guidelines">https://www.planningportal.nsw.gov.au/major-projects/assessment/policies-and-guidelines</a>; and</li> <li>• <a href="http://www.environment.gov.au/epbc/publications#assessments">http://www.environment.gov.au/epbc/publications#assessments</a>.</li> </ul>
<b>Engagement</b>	<p>During the preparation of the EIS, you should consult with the relevant local, State or Commonwealth Government authorities, infrastructure and service providers, community groups, affected landowners and any exploration licence and/or mineral title holders. In particular, you must undertake detailed consultation with affected landowners surrounding the project, and relevant government agencies including the relevant local Councils.</p> <p>The EIS must:</p> <ul style="list-style-type: none"> <li>• detail how engagement undertaken was consistent with the <i>Undertaking Engagement Guide: Guidance for State Significant Projects</i> (DPHI, 2024); and</li> <li>• describe the consultation process and the issues raised and identify where the design of the project has been amended in response to these issues. Where amendments have not been made to address an issue, an explanation should be provided.</li> </ul>

<b>Expiry Date</b>	If you do not lodge a Development Application and EIS for the project within 2 years of the issue date of these SEARs, your SEARs will expire. If an extension to these SEARs will be required, please consult with the Planning Secretary 3 months prior to the expiry date.
--------------------	---