Planning Secretary's Environmental Assessment Requirements

Section 4.12(8) of the *Environmental Planning and Assessment Act 1979*Part 8, Division 2 of the Environmental Planning and Assessment Regulation 2021

Application Number	SSD-59906734
Project Name	Yarrabin (Phoenix) Pumped Hydro Energy Storage project, which includes the development of an underground pumped hydro power station, upper and lower reservoirs, grid connection and ancillary infrastructure.
Location	35 km south-west of Mudgee within the Dubbo Regional and Mid-Western Regional local government areas.
Applicant	ACEN Phoenix Pty Ltd
Date of Issue	04/08/2023
	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 Development Guidelines</i> . In particular, the EIS must include: a stand-alone executive summary; a summary of the background to the project, including the alternatives that were considered to the project; a full description of the project accompanied by suitable maps and plans, including the: disturbance area; physical layout of the project over time, including sections of key components; key uses and activities to be carried out on site; 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; the relevant strategic context for the project having regard to: State and Commonwealth legislation, policies and guidelines, and current initiatives to improve energy security and reliability in the National Electricity Market; key features of the environment that could affect or be affected by the project (including any National Parks and Reserves); any other existing, approved or proposed projects that could result in cumulative impacts with the project; the relevant statutory context for the project under the <i>Environmental Planning and Assessment Act 1979</i> ; the assessment pathway for the project may be carried out; and any relevant matters for consideration; 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; a risk assessment of the potential environmental impacts of the development,
	 any relevant matters for consideration; 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;

regard to the requirements in any relevant Government legislation, policies and guidelines (see below), including:

- a description of the existing environment including adequate baseline data;
- community views;
- 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;
- a consolidated summary of the proposed mitigation measures for the project;
- 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 Cumulative Impact Assessment Guideline (DPIE, 2021);
- actions proposed to deal with any uncertainties associated with the assessment:
- · a detailed evaluation of the merits of the project as a whole.

Capital Investment Value and Employment

- Provide a detailed calculation of the capital investment value (CIV) of the development, prepared by an AIQS Certified Quantity Surveyor or RICS Chartered Quantity Surveyor in accordance with Planning Circular PS 21-020: Calculation of Capital Investment Value. The calculation of the estimated CIV is to be accurate at the date of application and include details of all components and assumptions from which it is derived; and
- Provide an estimate of the retained and new jobs that would be created during the construction and operational phases of the development, including details of the methodology to determine the figures provided.

The development application must be accompanied by:

- the consent of the owner/s of the land (as required in Section 23(1) of the Regulation); and
- a declaration from a Registered Environmental Assessment Practitioner that the EIS includes the information specified in the Department's Registered Environmental Assessment Practitioner Guidelines.

Key Issues

The level of assessment of key matters must be proportionate to the likely significance of the impacts on the matter.

In particular, the EIS must include the following:

Biodiversity:

- an assessment of the biodiversity impacts of the project on terrestrial, aquatic riparian and groundwater-dependent ecosystems (including listed threatened species and communities);
 - o an assessment of the biodiversity values and the likely biodiversity impacts of the project, in accordance the *Biodiversity Conservation Act 2016* (NSW), the Biodiversity Assessment Method (BAM) 2020 and documented in a Biodiversity Development Assessment Report (BDAR), including a detailed description of the proposed regime for avoiding, minimising, managing and reporting on the biodiversity impacts of the development over time:
 - 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 Burrendong, Steep Creek and Oakey Creek;

- o 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 development in accordance with the BC Act.

Heritage:

- assess 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
- assess the impact to historic heritage having regard to the NSW Heritage Manual.

Water:

- 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 development;
- an assessment of the impacts of the project on:
 - o the water catchment and quantity and quality of the region's surface and ground water;
 - o resources, including Lake Burrendong, Steep Creek and Oakey Creek;
 - water security for local downstream receivers including other dependent water industries;
 - o hydrological flows on site, including any potential flooding impacts:
 - o key water features on site, including potential impacts on riparian land;
 - type and extent of any dredging or reclamation activities within 'water land';
 - water-related infrastructure, basic landholder rights and the entitlements of water users:
- a description of the likely changes to the hydrological regime of the Lake Burrendong, Steep Creek and Oakey Creek, and any associated biodiversity impacts;
- 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 DPI Guidelines for Controlled Activities on Waterfront Land (2018) and (if necessary) Why Do Fish Need to Cross the Road? Fish Passage Requirements for Waterway Crossings (DPI 2003); and Policy & Guidelines for Fish Habitat Conservation & Management (DPI, 2013); and
- a strategy to manage spoil and enhance any new landforms created.

land

- an assessment of impacts of the project on:
 - 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;
 - o the topography of the site, including the creation of any new landforms;
 - o the geotechnical stability of the site;

- o consideration of agricultural land, Crown lands, flood prone land, irrigated lands, travelling stock routes, mining, quarries mineral or petroleum rights;
- completion of a Land Use Conflict Risk Assessment in accordance with the Department of Industry's Land Use Conflict Risk Assessment Guide;
 and
- a strategy to manage the progressive rehabilitation of the land disturbed by the project and enhance any new landforms created.

Transport and Access:

- an assessment of the peak and average traffic generation, including over-dimensional vehicles / heavy vehicles requiring escort and construction worker transportation;
- 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;
- a cumulative impact assessment of traffic from nearby developments;
- 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), road maintenance contributions, and any other traffic control measures, developed in consultation with the relevant road authority; and
- details of proposed transmission lines crossing navigable waters in accordance with:
 - o AS 6947-2009: Crossing of Waterways by Electricity Infrastructure; and
 - Crossings of NSW Navigable Waters Electricity Industry Code (TfNSW guideline).

Amenity:

- an assessment of the:
 - o construction, operational and road noise impacts of the project;
 - o blasting impacts of the project;
 - o visual impacts of the project, including lighting impacts and potential impacts on views of the project from key vantage points; and

· Air:

- an assessment of the particulate matter and greenhouse gas emissions of the project; and
- an assessment of the likely greenhouse gas impacts of the project including a breakdown of scope 1, 2 and 3 emissions as defined by the Greenhouse Gas Protocol and measures to minimise emissions and consideration of climate change adaptation related to the project.

Hazards:

- an assessment of:
 - o any potentially hazardous impacts of the project;
 - any public safety risks, including bushfire and flooding risks (including potential impacts on National Parks and Reserves, 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 development provide a preliminary risk screening in accordance with State Environmental Planning Policy (Resilience and Hazards); and
- 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).

Social: an assessment of the social impacts of the project in accordance with Social Impact Assessment Guideline (DPIE, 2021), including impacts on: o the locality; and o the demand for infrastructure and services in the Dubbo Regional and Mid-Western local government areas, including consideration of construction workforce accommodation. **Economic:** 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. Waste: 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, taking into consideration capacity and availability of local landfills. Plans and Documents The EIS must include all relevant plans, diagrams and relevant documentation required under Part 3 of the EP&A Regulation. Provide these as part of the EIS rather than as separate documents. In addition, the EIS must include high quality files of maps and figures of the subject site and proposal. Legislation, Policies & The assessment of the key issues listed above must take into account relevant Guidelines guidelines, policies, and plans as identified. A list of some of the legislation, policies and guidelines that may be relevant to the assessment the project can found https://www.planning.nsw.gov.au/Policy-and-Legislation/Planning-reforms/Rapid-Assessment-Framework/Improving-assessment-guidance https://www.planningportal.nsw.gov.au/major-projects/assessment/policies-and-g uidelines; and http://www.environment.gov.au/epbc/publications#assessments. During the preparation of the EIS, you should consult with the relevant local, State or Engagement 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 development, and relevant government agencies including the relevant local Councils. The EIS must: detail how engagement undertaken was consistent with the Undertaking Engagement Guide: Guidance for State Significant Projects (DPIE, November 2021); and describe the consultation process and the issues raised and identify where the design of the development has been amended in response to these issues. Where amendments have not been made to address an issue, an explanation should be provided. **Expiry Date** If you do not lodge a Development Application and EIS for the development 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.