Planning Secretary's Environmental Assessment Requirements

Section 5.16 of the Environmental Planning and Assessment Act 1979

Application Number	SSI 12590060
Project	 The Kurri Kurri Gas Fired Power Station Project which includes: a gas-fired power station (capable of operating with diesel fuel if necessary), supplying up to around 750 MW of gas-fired power generation; development of a new switchyard, substation infrastructure, and transmission line augmentation, if required, to connect into the existing transmission system; decommissioning of the gas-fired station and rehabilitation of the project site; and ancillary development including demolition of existing structures, if required, construction of ancillary infrastructure, access roads and utilities
Location	infrastructure. The former Kurri Kurri aluminium smelter site, in the Cessnock local government area.
Proponent	Snowy Hydro Limited
Date of Issue	05/02/2021
General Requirements	The Environmental Impact Statement (EIS) must comply with the requirements in Schedule 2 of the Environmental Planning and Assessment Regulation 2000 (EP&A Regulation). In particular, the EIS must include, but not necessarily be limited to, the following: - a stand-alone executive summary; - a full description of the project, including: - all components, materials and activities required to construct the project; - site plans and maps at an adequate scale showing: - the location and dimensions of all project components; and - existing infrastructure, land use, and environmental features in the vicinity of the project (including any other existing, approved or proposed infrastructure in the region); - likely staging or sequencing of the project, including construction and rehabilitation; - the likely interactions between the project and any other existing, approved or proposed major projects in the vicinity of the site (including the Hydro Kurri Kurri Aluminium Smelter Remediation and Kurri Kurri gas lateral pipeline projects); - a general description of any infrastructure that would be required for the project that is the subject of a separate approval process, including the gas lateral pipeline required to connect the project to the gas transmission system; - a justification for the proposed project as opposed to other alternatives; - statutory context for the project, including: - how the project meets the provisions and objectives of the Environmental Planning and Assessment Act 1979 (EP&A Act) and EP&A Regulation;

- consideration of the project against all relevant environmental planning instruments:
- any approvals that must be obtained before the project can commence;
- an assessment of the likely impacts of the project on the environment, focusing on the specific issues identified below, including:
 - a description of the existing environment likely to be affected by the project using sufficient baseline data;
 - a description of how the project has been designed to avoid and minimise impacts; and
 - an assessment of the potential impacts of the project, including any cumulative impacts, and taking into consideration relevant guidelines, policies, plans and industry codes of practice;
- a consolidated summary of all the proposed environmental management and monitoring measures, identifying all the commitments in the EIS; and
- an evaluation of the project as a whole having regard to:
 - relevant matters for consideration under the EP&A Act including ecologically sustainable development;
 - the strategic need and justification for the project having regard to energy security and reliability in NSW and the broader National Electricity Market including an analysis of gas supply availability; and
 - the biophysical, economic and social costs and benefits of the project.

While not exhaustive, Attachment 1 contains a list of some of the environmental planning instruments, guidelines, policies, and plans that may be relevant to the environmental assessment of the project. A list of some of the legislation, policies and guidelines that may also be relevant to the assessment of the project can be found at:

https://www.planningportal.nsw.gov.au/major-projects/assessment/policies-and-g uidelines

Key issues

The level of assessment of likely impacts should be commensurate with the significance or degree or extent of impact within the context of the proposed location and surrounding environment, and having regard to applicable NSW Government policies and guidelines.

In particular, the EIS must address the following matters:

- **Biodiversity** including:
 - an assessment of the biodiversity values and the likely biodiversity impacts of the project in accordance with the NSW Biodiversity Conservation Act 2016, the Biodiversity Assessment Method (BAM 2020) and documented in a Biodiversity Development Assessment Report (BDAR); and
 - the BDAR must document the application of the avoid, minimise and offset framework including assessing all direct, indirect and prescribed impacts in accordance with the BAM;
- **Heritage** including:
 - an assessment of the likely Aboriginal impacts of the project in accordance with the Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales (DECCW, 2010), including adequate consultation with Aboriginal stakeholders having regard to the Aboriginal Cultural Heritage Consultation Requirements for Proponents (OEH, 2010);
 - an assessment of likely non-Aboriginal heritage impacts of the project
- Hazards and Risks including:
 - a Preliminary Hazard Analysis (PHA), covering all aspects of the project

which may impose public risks, to be prepared consistent with Hazardous Industry Planning Advisory Paper No. 6 – Guidelines of Hazard Analysis (DPE, 2011) and Multi-level Risk Assessment. The PHA must demonstrate that the risks from the project comply with the criteria set out in Hazardous Industry Planning Advisory Paper No. 4 – Risk Criteria for Land Use Safety Planning (DPE, 2011); and

- an assessment of bushfire risk in accordance with *Planning for Bush Fire Protection 2019* (NSW RFS, 2019)
- a plume rise impact assessment prepared in accordance with CASA's guidelines for conducting plume rise assessments, and an assessment of the potential impact to aviation in the vicinity of the project;

Land and Contamination – including:

- an assessment of the extent and nature of any contaminated materials or acid sulphate soils on site, having regard to the Hydro Kurri Kurri Aluminium Smelter Remediation project and any other contamination assessments relevant to the site;
- an assessment of potential risks to human health and the receiving environment associated with potential contamination generated by the operation of the project; and
- a description of the measures that would be implemented to avoid or mitigate impacts;

Water – including:

- an assessment of the impacts of the project on groundwater aquifers and groundwater dependent ecosystems having regard to the NSW Aquifer Interference Policy and relevant Water Sharing Plans;
- an assessment of the impacts of the project on water quality having regard to the NSW Water Quality and River Flow Objectives (DECCW, 2006), Australian and New Zealand Guidelines for Fresh and Marine Water Quality (ANZG, 2018) and ANZECC Guidelines and Water Quality Objectives in NSW (DEC, 2006):
- a detailed site water balance for the project, including water supply and wastewater disposal arrangements;
- an assessment of flooding and the hydrological impacts of the project;
 and
- a description of the erosion and sediment control measures that would be implemented to mitigate any impacts during construction;

Air Quality – including:

- an assessment of the likely air quality impacts of the project in accordance with the *Approved Methods for the Modelling and Assessment of Air Pollutants in NSW* (EPA, 2016), including an assessment of scenarios where the project operates on diesel fuel;
- ability to comply with the relevant regulatory framework, specifically the Protection of the Environment Operations Act 1997 and the Protection of the Environment Operations (Clean Air) Regulation 2010; and
- an assessment of the likely greenhouse gas impacts of the project;

Noise and Vibration – including:

- assessment of the likely construction noise impacts of the project under the Interim Construction Noise Guideline (DECCW, 2009);
- an assessment of the likely operational noise impacts of the project under the NSW Noise Policy for Industry (EPA, 2017);
- an assessment of the likely road noise impacts of the project under the NSW Road Noise Policy (EPA, 2011); and
- an assessment of the likely vibration amenity and structural impacts of the project under Assessing Vibration: A Technical Guideline (DEC, 2006) and German Standard DIN 4150-3 Structural Vibration – effects of vibration on structures;

	 Transport – including: an assessment of the transport impacts of the project on the capacity, condition, safety and efficiency of the local and State road network; an assessment of the likely transport impacts to the site access route and site access point having regard to Oversized or Over mass vehicles (if required); a description of the measures that would be implemented to mitigate any impacts during construction; and a description of any proposed road upgrades developed in consultation with the relevant road authorities (if required). Visual – including an assessment of the likely visual and landscape character impacts of the project on the amenity of the surrounding area and private residences in the vicinity of the project; Socio-Economic – including an assessment of the likely impacts on the local community, demands on Council infrastructure and consideration of construction workforce accommodation; and Waste – identify, quantify and classify the likely waste stream to be generated during construction and operation, and describe the measures to be implemented to manage, reuse, recycle and safely dispose of this waste.
Consultation	During the preparation of the EIS, you must consult with the relevant local, State and Commonwealth Government authorities, infrastructure and service providers, community groups and affected landowners.
	The EIS must describe the consultation that was carried out, identify the issues raised during this consultation, and explain how these have been considered and addressed.
Further consultation after 2 years	If EIS for the project is not lodged within 2 years of the issue date of these Environmental Assessment Requirements, the Applicant must consult further with the Secretary in relation to the preparation of the EIS.

ATTACHMENT 1

Environmental Planning Instruments, Policies, Guidelines & Plans

Water		
Groundwater	NSW State Groundwater Policy Framework Document and component policies (DPI)	
	Relevant Water Sharing Plans	
	NSW Aquifer Interference Policy 2012 (DPI)	
	National Water Quality Management Strategy Guidelines for Groundwater Protection in Australia (ARMCANZ/ANZECC)	
	Guidelines for Development in the Drinking Water catchments (Hunter Water, 2017)	
Surface Water	NSW State Rivers and Estuary Policy (DPI Water)	
	NSW Government Water Quality and River Flow Objectives at http://www.environment.nsw.gov.au/ieo/	
	Using the ANZECC Guideline and Water Quality Objectives in NSW (DEC, 2006)	
	Australian and New Zealand Guidelines for Fresh and Marine Water Quality (ANZG)	
	Approved Methods for the Sampling and Analysis of Water Pollutants in NSW (DECC, 2008)	
	Managing Urban Stormwater: Soils & Construction (Landcom)	
	Technical Guidelines: Bunding & Spill Management (EPA)	
	NSW Guidelines for Controlled Activities (various) (DPI)	
Contamination		
	State Environmental Planning Policy No. 55 – Remediation of Land	
	Managing Land Contamination – Planning Guidelines SEPP 55 – Remediation of Land (EPA)	
	Guidelines for Consultants Reporting on Contaminated Sites (EPA)	
	Contaminated Sites Sampling Design Guidelines 1995 (EPA)	
	Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites (ANZECC)	
	National Environment Protection (Assessment of Site Contamination) Measure 1999 (with amendment April 2013)	
	Acid Sulfate Soils Manual (OEH)	
	Australian and New Zealand Guidelines for Fresh and Marine Water Quality (EPA)	
Land and Soils		
	Managing Urban Stormwater: Soils & Construction (Landcom)	
	Guidelines for developments adjoining land and water managed by the Department of Environment, Climate Change and Water (DECCW, 2010)	

The land and soil capability assessment scheme: Second approximation (OEH)

Guidelines for Surveying Soil and Land Resources (CSIRO)

Australian Soil and Land Survey Handbook (CSIRO)

Soil and Landscape Issues in Environmental Impact Assessment (DPI)

Biodiversity

Biodiversity Assessment Method 2020 (OEH)

Threatened Species Assessment Guidelines - Assessment of Significance (OEH)

Biosecurity Act 2015

Policy and Guidelines for Fish Habitat Conservation and Management – Update (DPI, 2013)

NSW State Groundwater Dependent Ecosystem Policy (DPI Water)

Risk Assessment Guidelines for Groundwater Dependent Ecosystems (DPI Water)

Why Do Fish Need to Cross the Road? Fish Passage Requirements for Waterway Crossings (DPI)

Fisheries Management Act 1994

Heritage

The Burra Charter (The Australia ICOMOS charter for places of cultural significance)

Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW (OEH, 2011)

Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010 (DECCW, 2010)

Code of Practice for the Archaeological Investigation of Aboriginal Objects in NSW (OEH)

NSW Heritage Manual (Heritage Office and Department of Urban Affairs and Planning, 1994)

Assessing Heritage Significance (NSW Heritage Office, 2001)

Statements of Heritage Impact (Heritage Office and Department of Urban Affairs and Planning, 2002)

Air

Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (EPA 2016)

Approved Methods for the Sampling and Analysis of Air Pollutants in NSW (DEC, 2005)

Technical Framework – Assessment and Management of Odour from Stationary Sources in NSW (DEC, 2006)

National Greenhouse Accounts Factors (Commonwealth)

Noise, Vibration and Blasting

NSW Noise Policy for Industry (EPA)

NSW Road Noise Policy and associated Application Notes (EPA)

Interim Construction Noise Guideline (DECCW, 2009)

Assessing Vibration: a Technical Guideline (DEC, 2006)

German Standard DIN 4150-3: Structural Vibration - effects of vibration on structures

Technical Basis for Guidelines to Minimise Annoyance Due to Blasting Overpressure and Ground Vibration (ANZECC, 1990)

Transport

Road and Related Facilities within the Department of Planning EIS Guidelines

Guide to Traffic Generating Projects (RMS)

Road Design Guide (RMS) & relevant Austroads Standards

Austroads Guide to Traffic Management Part 12: Traffic Impacts of Project

Hazards and Risks

State Environmental Planning Policy No. 33 – Hazardous and Offensive Project

Hazardous and Offensive Project Application Guidelines - Applying SEPP 33

Hazardous Industry Planning Advisory Paper No. 4 – Risk Criteria for Land Use Safety Planning

Hazardous Industry Planning Advisory Paper No. 6 - Guidelines for Hazard Analysis

Hazardous Industry Planning Advisory Paper No. 11 - Route Selection

AS2885 Pipelines - Gas and Liquid Petroleum, Operation and Maintenance

Planning for Bushfire Protection (NSW RFS)

Advisory Circular AC 139-05 v3.0 Plume Rise Assessments (CASA)

Visual

AS4282-1997 Control of the obtrusive effects of outdoor lighting

Waste

Waste Classification Guidelines (EPA)

Environmental Planning Instruments – General

State Environmental Planning Policy (State and Regional Development) 2011

State Environmental Planning Policy (Infrastructure) 2007

Cessnock Local Environmental Plan 2011

Relevant Water Sharing Plans (available at https://www.industry.nsw.gov.au/water)