Planning Secretary's Environmental Assessment Requirements

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

Application Number	SSI-22338205
Project Name	Kurri Kurri Lateral Pipeline Project
Location	Between the Sydney to Newcastle Pipeline (Plumpton to Hexham Northern Trunk) and the proposed Hunter Power Project (Kurri Kurri Power Station) site within Cessnock City, Maitland City, and City of Newcastle in NSW
Applicant	APA TRANSMISSION PTY LIMITED
Date of Issue	23 July 2021
General Requirements	The Environmental Impact Statement (EIS) for the project must comply with the requirements in Schedule 2 of the *Environmental Planning and Assessment Regulation 2000* (the 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: - details of construction, operation and decommissioning for the proposed pipeline route(s), including any proposed staging of the project or refurbishing of infrastructure over time; - all components, infrastructure, materials and activities required to construct the project, such as mainline valves, scraper and meter stations, construction compounds, access roads, and road upgrades (including any infrastructure that would be required for the project, but the subject of a separate approvals process); - site plans and maps at an adequate scale showing: o the location and dimensions of project components; o existing infrastructure, land use, and environmental features in the vicinity of the project (including any other existing, approved or proposed infrastructure in the region); and o the project corridor that has been assessed, including any allowance for micro-siting and identification of the key environmental constraints that have been considered in the design of the project; - details of the progressive rehabilitation of the site during and following construction and decommissioning of the pipeline infrastructure; - the likely interactions between the project and any other existing, approved or proposed major resource or infrastructure projects in the vicinity of the site including and not limited to the assets owned by the Hunter Water Corporation, residential developments surrounding the proposed pipeline route(s), the Hunter Power (Kurri Kurri Power Station) and Hydro Kurri Kurri Aluminium Smelter Remediation projects; and - workforce requirements during all phases of the project; · a general description of any infrastructure that would be required for, or linked to, the project that is the subject of a separate approval process; · strategic context of the project in regard to supplying gas to the Hunter Power (Kurri Kurri Power Station); · consideration of any capacity constraints of pipelines that this project would be connecting to for gas supply; · a list of any approvals that must be obtained before the project may 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; - an assessment of the likely impacts of all stages of the project, including any cumulative impacts, taking into consideration any relevant legislation, environmental planning instruments, guidelines, policies, plans and industry codes of practice; - a description of the measures that would be implemented to avoid, mitigate and/or offset residual impacts of the project, and the likely effectiveness of these measures; and - a description of the measures that would be implemented to monitor and report on the environmental performance of the project if it is approved; · a consolidated summary of all the proposed environmental management and monitoring measures, identifying all the commitments in the EIS; · consideration of the project against all relevant environmental planning instruments*;* · an evaluation of the project as a whole having regard to: - relevant matters for consideration under the *Environmental Planning and Assessment Act 1979,* including ecologically sustainable development; - the suitability of the site with respect to potential land use conflicts with existing and future surrounding land uses, significant mineral resources, coal exploration licences and mining leases; - the strategic need and justification for the project, in regard to its role in supplying gas to the Hunter Power (Kurri Kurri Power Station), relevant NSW and national policies and guidelines on electricity and gas supply and security including the NSW Future of Gas Statement, Australia's National Hydrogen Strategy, and NSW Government policy development on use of hydrogen; - feasible alternatives to the project (and its key components), including the consequences of not carrying out the project; and - the biophysical, economic and social costs and benefits of the project · a signed statement from the author of the EIS, certifying that the information contained within the document is neither false nor misleading. The EIS must also be accompanied by a report from a qualified quantity surveyor providing: · a detailed calculation of the capital investment value (CIV) (as defined in clause 3 of the Regulation) of the proposal, including details of all assumptions and components from which the CIV calculation is derived. The report must be prepared on company letterhead and indicate applicable GST component of the CIV; · an estimate of jobs that will be created during the construction and operational phases of the proposed infrastructure; and · certification that the information provided is accurate at the date of preparation.
Key issues	The EIS must address the following specific issues with the level of assessment of likely impacts proportionate to the significance of, or degree, of impact on, the issue, within the context of the project location and the surrounding environment and having regard to applicable NSW Government policies and guidelines. · **Land and Soils** – including: - an assessment of the potential impacts of proposed pipeline route(s) for the project on existing and future land uses and developments on the site and adjacent land, including the Blackhill industrial land, consideration of agricultural land, biosecurity and soil resources, flood prone land, Crown lands, mining, quarries, or mineral or petroleum rights or resources, and water supply pipelines and assets owned by the Hunter Water Corporation; - details of the legislative functions to authorise access, use or occupy any

affected land and compliance with the relevant legislation;
- an assessment of the compatibility of the project with existing and proposed land uses, including consideration of zoning provisions applying to the land and location of any future potential biodiversity offset areas (if required) in relation to potential resource sterilisation; and
- a description of construction erosion and sediment controls including how the project, on areas of erosion, salinity or acid-sulphate risk, including steep gradient land or erodible soils types, would be managed and any contingency requirements to address residual impacts, having regard to the Hydro Kurri Kurri Aluminium Smelter Remediation project and any other contamination assessments relevant to the site;

· **Water** – including:
- a detailed and consolidated site water balance, including a description of water demand, a breakdown of authorised and reliable water supplies and assessment of the available water entitlements for the project (if required), and the measures to minimise water use;
- details of water requirements and supply arrangements for the project;
- an assessment of the likely 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 the quantity and/or quality of the region's surface and groundwater resources, having regard to the *Guidelines for Controlled Activities on Waterfront Land*, *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);
- an assessment of flooding and the hydrological impacts of the project;
- identification of any licensing requirements or other approvals under the *Water Management Act 2000*; and
- an assessment of the likely impacts of the project on watercourses, riparian land, water related infrastructure and other water users, including use and discharge of water during construction, commissioning and maintenance of the pipeline infrastructure, and measure to mitigate the impacts;

· **Biodiversity** – including:
- an assessment of the biodiversity values and the likely biodiversity impacts of the project in accordance with Section 7.9 of the *Biodiversity Conservation Act 2016* (NSW), the *Biodiversity Assessment Method* (BAM 2020) and documented in a Biodiversity Development Assessment Report (BDAR);
- 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; and
- an assessment of the likely impacts of the project on aquatic ecology and key fisheries issues, including creek crossing and access tracks for construction and maintenance, aquatic biodiversity and key fish habitats;

· **Aboriginal Cultural Heritage** – an assessment of the Aboriginal heritage values and likely Aboriginal heritage (cultural and archaeological) impacts of the project in accordance with the *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (DECCW, 2010), and documented in an Aboriginal Cultural Heritage Assessment Report (ACHAR). The ACHAR must:
- document the significance of cultural heritage values for Aboriginal people who have a cultural association with the land and be prepared in consultation with the local Aboriginal community in accordance with *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (DECCW, 2010);
- include results of a surface survey (and test excavations, if required) undertaken by a qualified archaeologist to inform the need for targeted test

excavation to better assess the integrity, extent, distribution, nature and overall significance of the archaeological record; and
- demonstrate attempts to avoid impact upon cultural heritage values and identify any conservation outcomes, including mitigation measures and procedures for accidental finds at any stage of the project;

· **Historic Heritage** – an assessment of the impact on historic heritage in accordance with the *NSW Heritage Manual*, prepared by a suitably qualified consultant, including:
- heritage conservation areas and State and local heritage items within and near the site, and detailed mapping of the items and mitigation measures for potential impacts on heritage values; and
- if identified, an historical archaeological assessment, in accordance with the *Archaeological Assessment* (1996) and *Assessing Significance for Historical Archaeological Sites and Relics* (2009), including significance of the relics and mitigation strategy. If harm cannot avoided, a Research Design and Excavation Methodology must outline the proposed excavations or salvage programme;

· **Air Quality and Odour** – including:
- identification of all sources or potential sources of air emissions (point or fugitive) and odour from the project;
- an assessment of the likely air quality and odour impacts of the project in accordance with the *Approved Methods for the Modelling and Assessment of Air Pollutants in NSW* (EPA), *Assessment and Management of Odour from Stationary Sources in NSW* (DEC, 2006); *Technical Notes: Assessment and Management of Odour from Stationary Sources in NSW* (DEC, 2006);
- demonstrated 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 (GHG) impacts of the project, including measures to minimise GHG emissions;

· **Noise and Vibration** – including:
- an 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), *German Standard DIN 4150-3 Structural Vibration – effects of vibration on structures*, and *Technical Basis for Guidelines to Minimise Annoyance due to Blasting Overpressure and Ground Vibration* (ANZECC, 1990);

· **Transport** – including:
- an assessment of the likely transport impacts of the project on the capacity, condition, safety and efficiency of the local and State road network, documented in a Traffic Impact Assessment, including:
  - o details of traffic types and volumes likely to be generated by the project, including all relevant vehicular traffic routes and intersections for access to / from the site along the proposed pipeline route option(s);
  - o any crossings or utility installation, any potential interactions with Hunter Expressway (6011), the Pacific Motorway (6003), John Renshaw Drive (MR588) and Main Road (MR195 Maitland – Kurri Kurri) and any planned projects (including M1 Motorway to Raymond Terrance, Black Hill Development MR588 intersection works, MR195 Testers Hollow);

	o details of measures to mitigate and/or manage potential impacts including a schedule of all required road upgrades, road maintenance contributions, and any other traffic control measures, developed in consultation with the relevant road authorities; and o details of measures to mitigate and/or manage potential impacts of the project on rail infrastructure; · **Hazards and Risks** – including: - a Preliminary Hazard Analysis (PHA), covering an assessment of the hazards and risk impacts likely to be associated with the project, including gas leaks and transport, handling and management of dangerous goods. The assessment must 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: o be a quantitative risk assessment (QRA) to estimate the risks from the pipeline to the surrounding land uses, including ground movement or subsidence within or close to the Black Hill mine site, and with reference to applicable Australian Standards (including *AS2885 Pipelines – Gas and Liquid Petroleum - Operation and Maintenance*) and licensing requirements under the *Pipelines Act 1967*; o demonstrate that the pipeline corridors and designs to which approval is sought can comply with the Department's *Hazardous Industry Planning Advisory Paper No. 4, 'Risk Criteria for Land Use Safety Planning'*; and o consider the PHA prepared for the proposed Hunter Power Project (Kurri Kurri Power Station (SSI-12590060), particularly in relation to safeguards against accident propagation or escalation between the two projects; and - on-going maintenance and safety management of the project, including potential impacts on and from bushfires and floods; · **Visual** – including an assessment of the likely visual and landscape character impacts of the project on the amenity of the surrounding area and private landowners in the vicinity of the project; · **Social & Economic** – including an assessment of the likely social impacts and benefits of the project, including the likely impacts of the project on the local community, demands on Council infrastructure and services and cumulative impacts (considering other developments in the locality) (note that the Department's *Social Impact Assessment Guideline For State Significant Developments* July 2021 may apply, subject to transitional arrangements); and · **Waste Management** – including identification, quantification and classification of the likely waste streams, including discharges with potential for water impacts, likely to be generated during construction and operation, and description of the measures to be implemented to manage, reuse, recycle and safely dispose of this waste.
Plans and Documents	The EIS must include all relevant plans, architectural drawings, diagrams and relevant documentation required under Schedule 1 of the 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.
Consultation	During the preparation of the EIS, you must consult with the relevant local, State or Commonwealth Government authorities, infrastructure and service providers, community groups, Registered Aboriginal Parties (RAPs), and affected landowners, including mine operators and written notification of the proposal to the titleholders including a map indicating the proposal area.

	The EIS must describe the consultation process and the issues raised and identify where the design of the infrastructure has been amended in response to these issues. Where amendments have not been made to address an issue, a short explanation should be provided.
Expiry Date	If you do not lodge an 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.
References	The assessment of the key issues listed above must take into account relevant guidelines, policies, and plans as identified. While not exhaustive, **Attachment 1** contains a list of some of the guidelines, policies, and plans that may be relevant to the environmental assessment of this proposal. In the event of any guidelines being updated, the latest version must be applied, subject to any transitional arrangements and subject to timing of lodgement of the EIS.

ATTACHMENT 1

Environmental Planning Instruments, Policies, Guidelines & Plans

Please also refer to the Department's Policies and Guidelines including strategic plans and guidelines at:

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

Water	
Water Sharing Plans	Relevant Water Sharing Plans along the pipeline route
Groundwater	NSW State Groundwater Policy Framework Document and component policies (DPI)
	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)
Flooding	Floodplain Project Manual (OEH)
	Floodplain Risk Management Guideline (OEH)
Surface Water	NSW State Rivers and Estuary Policy (DPI Water)
	Guidelines for Controlled Activities on Waterfront Land
	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)
	National Water Quality Management Strategy: Australian Guidelines for Fresh and Marine Water Quality (ANZECC/ARMCANZ)
	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)
Land and Contamination	
	The land and soil capability assessment scheme: Second approximation (OEH)
	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)
	Contaminated Sites Sampling Design Guidelines 1995 (EPA)
	Guidelines for Surveying Soil and Land Resources (CSIRO)
	Australian Soil and Land Survey Handbook CSIRO)

	Soil and Landscape Issues in Environmental Impact Assessment (DPI)
	Primefact 1063: Infrastructure proposals on rural land (DPI)
	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)
Biodiversity	
	Biodiversity Assessment Method 2020 (OEH)
	Why Do Fish Need to Cross the Road? Fish Passage Requirements for Waterway Crossings (DPI)
	Ancillary rules: biodiversity conservation actions (OEH)
	Policy and Guidelines for Fish Habitat Conservation and Management – Update (DPI, 2013)
	Threatened Species Survey and Assessment Guidelines (various – OEH)
	NSW State Groundwater Dependent Ecosystem Policy (DPI Water)
	Risk Assessment Guidelines for Groundwater Dependent Ecosystems (DPI Water)
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)
	Archaeological Assessment (1996)
	Assessing Significance for Historical Archaeological Sites and Relics (2009)
	Cessnock Community Strategic Plan 2027
	Newcastle 2030 Community Strategic Plan
	Maitland Local Strategic Planning Statement 2040+
Air	
	Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (EPA)

	Approved Methods for the Sampling and Analysis of Air Pollutants in NSW (EPA)
	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 (EPA)
	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	
	Guide to Traffic Generating Projects (2002)
	Austroads Guide to Road Design & relevant Austroads Standards
	Austroads Guide to Traffic Management Part 12: Integrated Transport Assessments (ITAs) for Developments (2020)
	The Roads and Related Facilities EIS Guideline (NSW Government, 1996)
Lighting and Visual	
	AS4282-1997 Control of the obtrusive effects of outdoor lighting
Hazards and Risks	
	Hazardous and Offensive Development 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
	Australian Standard 2885 Pipelines – The Standard for Gas and Liquid Petroleum Pipelines
	Planning for Bushfire Protection (NSW RFS)
Waste	
	Waste Classification Guidelines (EPA)
Environmental Planning Instruments – General	
	State Environmental Planning Policy (State and Regional Development) 2011
	State Environmental Planning Policy (Infrastructure) 2007
	State Environmental Planning Policy (Primary Production and Rural Development) 2019

State Environmental Planning Policy No. 33 – Hazardous and Offensive Development
State Environmental Planning Policy No. 55 – Remediation of Land
State Environmental Planning Policy (Koala Habitat Protection) 2020 and 2021
Relevant Local Environmental Plans along the pipeline route
Hunter Regional Plan 2036
Greater Newcastle Metropolitan Plan (DPIE, 2018)
Newcastle Local Strategic Planning Statement (City of Newcastle, 2021)