

Director-General's Requirements

Section 75F of the *Environmental Planning and Assessment Act 1979*

Concept Plan	<p>Construction and operation of two gas-fired power stations (with the combined capacity of up to 800 megawatts) comprising:</p> <ul style="list-style-type: none"> a power station to be constructed and operated by Energy Australia, comprising two open cycle gas turbines with a total capacity of 250-350 megawatts; a power station to be constructed and operated by Delta Australia, which is proposed to be developed in two stages and comprises: <ul style="list-style-type: none"> Stage 1: two open cycle turbine with a total capacity of 250-350 megawatts; and Stage 2: conversion to a combined cycle facility with a total capacity of 400 to 450 megawatts; and associated infrastructure to be jointly constructed and operated including a transmission line, a gas pipeline and access roads.
Site	<p>An approximately 116 hectare site (Part of Lot 18 DP1056592, to be identified as Lot 2 DP1120270 upon purchase) off Canyonleigh Road Brayton, approximately 12 kilometres from the village of Marulan, in the Upper Lachlan Shire local government area (LGA).</p> <p>The gas pipeline would extend outside of the site to connect to the Moomba to Sydney gas pipeline, along a corridor located in the Goulburn-Mulwaree Shire LGA.</p>
Proponents	Energy Australia and Delta Electricity
Date of Issue	3 March 2008
Date of Expiration	3 March 2010
General Requirements	<p>The Environmental Assessment (EA) must be prepared to a high technical and scientific standard and must include:</p> <ul style="list-style-type: none"> an executive summary; a description of the concept plan during construction and operational including: <ul style="list-style-type: none"> identification of all ancillary infrastructure and works associated with the concept plan (including any sealing or upgrading of existing access roads; disturbances to existing infrastructure from the gas pipeline route; and water use, reuse and treatment options); construction and operational staging; location options for the pipeline including identifying existing constraints and criteria to be used in determining a final viable option; and delineation of operational responsibilities, including in relation to compliance management, monitoring and maintenance; consideration of any relevant statutory provisions including the consistency of the concept plan with the objects of the <i>Environmental Planning and Assessment Act 1979</i>; an assessment of the key issues specified below, considering all relevant cumulative impact scenarios including concurrent construction, concurrent operations, and concurrent construction/operation of sperate activities at the same time; a draft Statement of Commitments outlining environmental management, mitigation and monitoring measures, including delineation of responsibility between Proponents. In particular, details of any management and monitoring strategies that would be implemented as part of the subsequent project stages to ensure that potential cumulative impacts are mitigated and/or managed consistently across the site; and a conclusion justifying the concept plan taking into consideration the cumulative environmental, social and economic impacts of the concept plan; the suitability of the site (including of the gas pipeline corridor); and the public interest; and certification by the author of the Environment Assessment that the information contained in the Assessment is neither false nor misleading.
Key Assessment Requirements	<p>The EA must include an assessment of the following key issues:</p> <ul style="list-style-type: none"> Strategic Planning – the EA must provide a strategic assessment of the need, scale, scope and location of the concept plan in relation to predicted electricity demand, transmission constraints, and the strategic direction of the region and the State regarding the State electricity supply and demand and electricity generation technologies. The EA must also provide an analysis of the suitability of the site (including of the gas pipeline corridor) with consideration to relevant strategic planning (including the draft Sydney - Canberra Corridor Strategy), land use and development

matters, including potential land use conflicts with existing and future surrounding land users. The EA must clearly describe the objectives of the proposal, alternatives considered and justification for the preferred proposal. In addition, the EA must demonstrate the benefits of the proposal at a strategic and local scale.

- **Water Quantity and Quality Impacts** – The EA must provide:
 - a cumulative water balance for the concept plan identifying the maximum water use, wastewater generation and disposal requirements for the operation of the proposal considering each stage of the concept plan, each phase of operation and ancillary activities (including bush fire control);
 - an assessment of the cumulative water needs of the concept plan, demonstrating the availability of water for the proposal and the viability of these water sources for sustainable use over the life of the concept plan. Consideration shall be given to water reuse and recycling options (including use of treated effluent, rainwater and on site treatment), the security of supply, current and future water demand in the region and how the concept plan will likely impact on potentially affected users;
 - an assessment of cumulative water quality impacts of the concept plan, including stormwater management. The EA must reflect a design philosophy of zero water discharge from the site, except for natural surface water flows. For the purpose of assessment of impacts on the drinking water catchment, *Drinking Water Catchments Regional Environmental Plan No. 1* specifies water quality criteria and specific heads of consideration; and
 - a cumulative assessment of the hydrology impacts of the concept plan, in accordance with the *Floodplain Development Manual (2005)*, describing risks to existing and planned future receivers and infrastructure based on the modelling of a full range of flood sizes up to and including the probable maximum flood. Floods design criteria for surface infrastructure and construction flood management requirements must be identified. Where temporary or permanent diversions of waterways are proposed to minimise flood risk to the site, the EA must assess the impacts of flow diversion to offsite flood conditions and to instream and riparian ecology (including identification of the construction and monitoring procedures to be implemented to ensure neutral or beneficial effect to the waterways).
- **Greenhouse Gases** – the EA must include a cumulative greenhouse gas assessment, incorporating a quantitative model showing the tonnages of each greenhouse gas produced (directly and indirectly from the development) per year. These figures must be expressed as a percentage of the total national greenhouse gases produced per year over the life of the concept plan. If a greenhouse gas offset is proposed, full details of this offset(s) must be included in the EA.
- **Air Quality Impacts** – the EA must include a cumulative operational air quality impact assessment demonstrating no adverse impact on human health or the environment. The assessment must be prepared in accordance with the *Approved Methods for Modelling and Assessment of Air Pollutants in NSW* (DEC, 2005) identifying cumulative emissions at a local, regional and interregional level. The EA must consider air quality impacts from the operation of the concept plan in each stage of its development and mode of operation, including start-up, shut-down, full and partial load operations, and if relevant, black start capacity. The EA must clearly outline mitigation measures to be applied and the extent to which these measures are likely to be effective in achieving the relevant environmental outcomes. A cost-benefit analysis on different mitigation measures/technologies that have been investigated should also be included.
- **Noise Impacts** – the EA must include a cumulative operational noise impact assessment for the concept plan, conducted in accordance with *NSW Industrial Noise Policy* (EPA, 2000). The assessment must include consideration of noise impacts the concept plan during each stage of development and each phase of operation, with a particular focus on scenarios under which meteorological conditions characteristic of the locality may exacerbate impacts. The EA must also include a cumulative assessment of the construction noise impacts of the concept plan, against the criteria provided in Chapter 171 of the *Environmental Noise Control Manual* (EPA, 2004). Cumulative road transport noise would need to be assessed in accordance with *Environmental Criteria for Road Traffic Noise* (EPA, 1999). The EA must clearly outline the noise mitigation, monitoring and management measures for the concept plan.
- **Flora and Fauna Impacts** – the EA must include a cumulative and worst case assessment of impacts of the concept plan on flora and fauna, prepared in accordance with *Guidelines for Threatened Species Assessment* (DEC, July 2005), considering all ancillary infrastructure and activities (including the pipe line corridor and bush fire set

	<p>backs). The EA must specifically consider threatened species and communities listed under both State and Commonwealth legislation that have been recorded on the site and surrounding land, and impacts to riparian and instream habitat in the case of disturbance of waterways or flow conditions. The EA must detail offset requirements for the concept plan, demonstrating that viable offset options are available to compensate for the cumulative, worst case impacts of the concept plan, including clear delineation of responsibilities for performance monitoring and maintenance requirements.</p> <ul style="list-style-type: none"> • Indigenous Heritage – the EA must include a cumulative assessment of impacts of the concept plan on indigenous heritage values (archaeological and cultural), including a consistent consultation strategy across the site. The assessment must be prepared in accordance with <i>Guidelines for Aboriginal Cultural Impact Assessment and Community Consultation</i> (DEC, July 2005) and identify measures to avoid, minimise, manage and/or offset impacts. • Hazards and Risk Impacts – the EA must include a screening of potential hazards likely to be associated with the subsequent project stages of the concept plan (including gas pipeline corridor) to determine the potential for off site impacts and any requirement for a Preliminary Hazard Analysis (PHA), consistent with the approach outlined in Department's <i>Hazardous Industry Planning Advisory Paper No. 3</i>, <i>Hazardous Industry Planning Advisory Paper No. 6</i> and <i>Multi-level Risk Assessment</i>, and with reference to applicable Australian Standards (including AS2885 Pipelines - Gas and Liquid Petroleum – Operation and Maintenance). Risk impacts associated with the transport of dangerous goods and hazardous materials must be documented with reference to the Department's draft <i>Route Selection</i> guideline. • General Environmental Risk Analysis – notwithstanding the above key assessment requirements, the EA must include an environmental risk analysis to identify potential cumulative environmental impacts associated with the concept plan (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 EA.
Consultation Requirements	<p>You must undertake an appropriate and justified level of consultation with the following parties during the preparation of the EA:</p> <ul style="list-style-type: none"> • NSW Department of Environment and Climate Change; • Upper Lachlan Council; • Goulburn-Mulwaree Council; • Sydney Catchment Authority; • NSW Department of Water and Energy; • NSW Department of Primary Industries; and • the local community and land owners. <p>The EA must clearly indicate issues raised by stakeholders during consultation, and how those matters have been addressed in the EA.</p>

