Director-General's Requirements

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

Project	Construction and operation of a gas-fired power station, in stages, with the initial stage comprising between two and four open cycle gas turbines with a capacity of between 250 and 750 megawatts and the ultimate stage comprising a facility with a capacity of up to 1,500 megawatts. The power station is proposed to be operated as a peaking power station which would operate up to 15% of the year. The proposal includes: • gas-fired power station facility; • infrastructure within the site including access road, transmission connection and general site infrastructure; and • infrastructure beyond the site including lateral gas pipeline from the Moomba to Sydney Gas pipeline and gas offtake from this pipeline.
Site	An approximately 500 hectare site located off Walshes Road, approximately three kilometres from the township of Dalton, in the Upper Lachlan Shire local government area (LGA).
Proponent	AGL Energy Limited
Date of Issue	19 April 2010
Date of Expiration	19 April 2012
General Requirements	The Environmental Assessment (EA) must include: • an **executive summary;** • a **description of the project** including construction, operation and staging. The description should include any required infrastructure such as pipelines and connection to the grid for the operation of the project; • consideration of any **relevant statutory provisions** including the consistency of the project with the objects of the *Environmental Planning and Assessment Act 1979*; • consideration of **alternatives** to the project, including site selection; • an **assessment of the environmental impacts** of the project with particular focus on the key assessment requirements specified below and proposed mitigation/management measures for residual environmental impacts; • **justification** for undertaking the project with consideration of the benefits/impacts of the proposal (including community benefits) and proposed management/ mitigation/ monitoring; • a **draft Statement of Commitments** outlining environmental management, mitigation and monitoring measures; and • **certification** by the author of the Environmental Assessment that the information contained in the Assessment is neither false nor misleading.
Key Assessment Requirements	The EA must include an assessment of the following key issues: • **Strategic Justification** - the Environmental Assessment must: → include a strategic assessment of the need, scale, scope, operational mode (e.g. baseload, intermediate, peaking) and location for the project in relation to predicted electricity demand, transmission constraints and the strategic direction of the region and the State in relation to electricity supply, demand and electricity generation technologies; → include an analysis of site suitability with respect to potential land use conflicts with existing and future land uses taking into account local and strategic land use objectives; and → describe alternatives considered for the project in particular technology and configuration including fuel source, air emission, water use and options for waste disposal/ beneficial reuse and provide justification for the project demonstrating its benefits at a local and strategic scale in comparison to alternatives considered, including the do nothing option. • **Greenhouse Gases** - the Environmental Assessment must include a comprehensive greenhouse gas assessment undertaken in accordance with the methodology specified in the *National Greenhouse Accounts (NGA) Factors* (latest release) including: → quantification of emissions (in tonnes of carbon dioxide equivalent) in accordance with the *Greenhouse Gas Protocol: Corporate Standard (World Council for Sustainable Business Development & World Resources Institute)* including: direct emissions (Scope 1), indirect emissions from electricity (Scope 2) and any significant up or down stream emissions (Scope 3) considering all stages of the

project (annual emission for each year of the project during construction, operation and decommissioning is required to be provided);

→ comparison of predicted emissions intensity and thermal efficiency against best achievable practice and current NSW averages for the activity, and of predicted emissions against total annual national emissions (expressed as a percentage of total national greenhouse gases production per year over the life of the project);

→ evaluation of the availability and feasibility of measures to reduce and/ or offset the greenhouse emissions of the project including options for carbon capture and storage. Where current available mitigation technology is not technically or economically feasible, the Environmental Assessment must demonstrate that the proposal will use best available technology, including carbon capture readiness, and identify options for triggers that would require staged implementation of emerging mitigation technologies; and

→ evaluation of the project in the light of various carbon emission prices per tonne both with and without proposed mitigation measures.

- **Air Quality - –** the Environmental Assessment must include a comprehensive air quality impact assessment based on dispersion modelling prepared in accordance with the *Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales* (DECC, 2005) (Approved Methods) considering worst case operating scenarios and meteorological conditions, representative monitoring and receiver locations and cumulative impacts, as applicable. The Environmental Assessment must address air quality impacts at a local, regional and interregional level and include a plume rise assessment. The assessment must demonstrate that the project would meet the impact assessment criteria in Section 7 of the Approved Methods and the requirements of the *Protection of the Environment Operations (Clean Air) Regulation 2002* for all relevant pollutants based on ground level concentrations at the plant boundary and beyond at all sensitive receptors. The Environmental Assessment must clearly demonstrate that the project has been designed to include the application of Best Available Control Technology (BACT) in relation to air emissions. The assessment must include a framework for the mitigation, management and monitoring of air quality impacts, particularly with respect to sensitive receptors likely to be impacted by cumulative air quality impacts in the local area.
- **Water Quantity and Quality Impacts** The Environmental Assessment must include an assessment of the water quantity and quality impacts of the proposal (i.e. surface and groundwater), with particular reference to the water needs for the life of the project, the proposed source of water, and the implementation of water saving measures (including use of rainwater and runoff from sealed, hardstand and disturbed areas as much as practically possible). In this regard, a water balance must be provided. The Proponent must be able to demonstrate that an adequate and secure water supply is available for the life of the project. The Environmental Assessment must demonstrate that any water crossings are designed in accordance with DWE Guidelines *Controlled Activity Approvals.* The Environmental Assessment must consider the adherence to existing embargo provisions for proposed water use or impact (e.g. Murray Darling Basin Groundwater Embargo – Order 2). The Environmental Assessment must also identify the quantity and quality of wastewater, how this wastewater would be disposed of, and how stormwater would be managed at the site. The Environmental Assessment must reflect a design philosophy of zero water discharge from the site, except for natural surface water flows.
- **Noise Impacts** - the Environmental Assessment must include a comprehensive operational noise impact assessment for the project, prepared in accordance with *NSW Industrial Noise Policy* (EPA, 2000) considering worst case operating scenarios and meteorological conditions, representative monitoring and receiver locations, and cumulative impacts from any adjacent relevant land uses (existing and approved). The assessment must consider the potential for low frequency noise generation, peak noise events with the potential to cause sleep disturbance and the effects of stable atmospheric conditions. The Environmental Assessment must also consider the potential for:

  → construction noise impacts consistent with the *Interim Construction Noise Guidelines* (DECCW, 2009);

  → vibration impacts during construction and operation consistent with *Assessing Vibration: A Technical Guideline* (DECC, 2006); and

  → traffic generated noise during construction and operation consistent with *Environmental Criteria for Road Traffic Noise* (EPA, 1999). The method, data and assumptions used to assess the impact of road haulage on residential properties must be fully documented and justified.

  The Environmental Assessment must clearly outline the noise mitigation, monitoring

	and management measures the Proponent intends to apply to the project. • **Flora and Fauna Impacts** - the Environmental Assessment must include an assessment of impacts of the project on flora and fauna, prepared in accordance with *Guidelines for Threatened Species Assessment* (DEC/ DPI, July 2005) and specifically report on the considerations listed in Step 3 and whether it meets each of the key thresholds set out in Step 5. The development will need to avoid any endangerered ecological communities and provide an appropriate buffer and asset protection zone. The Environmental Assessment must specifically consider threatened species and communities listed under both State and Commonwealth legislation that have been recorded on the site and surrounding land. The Environmental Assessment must also detail measures to avoid or mitigate impacts on threatened species associated with the siting and construction of any access roads and other infrastructure. This must include the identification of any potentially impacted paddock and fence trees with an assessment of the functioning of this vegetation in terms of habitat and movement of arboreal threatened fauna in the local area; • **Indigenous Heritage** - the Environmental Assessment must include an assessment of impacts on Aboriginal heritage, in accordance with draft *Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation* (DEC, 2005). The Environmental Assessment must also include an assessment of the potential for the project to impact on known items of non-Aboriginal heritage significance, and include a management framework for management of any additional heritage items that may be uncovered during construction of the project. The Environmental Assessment needs to clearly demonstrate that effective community consultation with Aboriginal communities has been undertaken in determining and assessing impacts, developing options and making final recommendations for the mitigation of impacts. • **Hazards and Risks** - the Environmental Assessment must include a screening of potential hazards on site (including new gas supply infrastructure) to determine the potential for off site impacts and any requirement for a Preliminary Hazard Analysis (PHA). The PHA, should potential off-site impacts be identified, must be prepared in accordance with the Department's *Hazardous Industry Planning Advisory Paper No. 3, Hazardous Industry Planning Advisory Paper No. 6* and *Multi-level Risk Assessment* 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 *Route Selection* guideline. • **Visual Impacts** – the Environmental Assessment must include an assessment of the visual impact of the project from representative viewing points including residential receivers, settlements and significant public view points and include the mitigation and management of visual amenity impacts on affected receivers. An overview of the effectiveness and reliability of the measures and any residual impacts after the implementation of such measures must also be included. • **Traffic and Transport** – the Environmental Assessment must include an assessment of the traffic and transport impacts of the project, particularly during the project's construction stage. The assessment must include a discussion of measures that will be implemented to mitigate adverse impacts on the public road network, particularly from the haulage of heavy plant and equipment to the site. • **General Environmental Risk Analysis** – notwithstanding the above key assessment requirements, the Environmental Assessment must include an environmental risk analysis to identify potential environmental impacts associated with the project (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 Environmental Assessment.
Consultation Requirements	You must undertake an appropriate and justified level of consultation with the following parties during the preparation of the Environmental Assessment: • NSW Department of Environment, Climate Change and Water including separate consultation with the Office of Water; • Upper Lachlan Shire Council; • NSW Department of Industry and Investment; • Transgrid; • Air Services Australia, • Civil Aviation Authority; • Department of Defence; • Rural Fire Service; • Lachlan Catchment Management Authority; and • the local community including surrounding land owners.

	The Environmental Assessment must clearly indicate issues raised by stakeholders during consultation, and how those matters have been addressed in the document.