

Marulan Gas Turbine Facilities



Environmental Assessment



JOINT CONCEPT APPLICATION

VOLUME 2

APPENDICES

August 2008

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MARULAN GAS TURBINE FACILITIES

ENVIRONMENTAL ASSESSMENT

JOINT CONCEPT APPLICATION

VOLUME 2

APPENDICES

August 2008

Summary of Chapter / Section of Marulan Gas Turbine Facilities Environmental Assessment that Director-General's Requirements are addressed

Joint Concept Approval Environmental Assessment Requirements – MP07-0174

CA = Concept Application

PA = Project Applications

Requirement	Description	Chapter / Section of Environmental Assessment
General Requirements		
Executive Summary	The Environmental Assessment (EA) must be prepared to a high technical and scientific standard and must include an executive summary.	CA and PA - Executive Summary
Description of the Concept Plan	The EA must include 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); 	CA - Chapter 4.7 - Section 4.7 and 4.8 (further detail in Chapters 10 and 14)
	<ul style="list-style-type: none"> • construction and operational staging; 	CA – Chapter 4 Sections 4.4.8, 4.5.8, 4.6.8, 4.7.7 and 4.8.6
	<ul style="list-style-type: none"> • location options for the pipeline including identifying existing constraints and criteria to be used in determining a final viable option; and 	CA – Chapter 4 - Sections 4.7.1 and 4.7.2
	<ul style="list-style-type: none"> • delineation of operational responsibilities, including in relation to compliance management, monitoring and maintenance. 	CA – Chapter 19
Relevant Statutory provisions	The EA must include a 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> .	CA and PA - Chapter 5
Assessment of the key issues	The EA must include an assessment of the key issues (specified below), considering all relevant cumulative impact scenarios including concurrent construction, concurrent operations, and concurrent construction/operation of separate activities at the same time.	CA and PA - Chapters 5, 7, 8, 11, 12, 14 and 15

Summary of Chapter / Section of Marulan Gas Turbine Facilities Environmental Assessment that Director-General's Requirements are addressed

Joint Concept Approval Environmental Assessment Requirements – MP07-0174

Requirement	Description	Chapter / Section of Environmental Assessment
Draft Statement of Commitments	The EA must include 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.	CA and PA - Chapter 19
Conclusion Justifying the Concept Plan	The EA must include 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.	CA - Chapter 20
Certification	The EA must include a certification by the author of the EA that the information contained in the Assessment is neither false nor misleading.	Certificate of Validity
Key Assessment Requirements		
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.	CA - Chapter 5

Summary of Chapter / Section of Marulan Gas Turbine Facilities Environmental Assessment that Director-General's Requirements are addressed

Joint Concept Approval Environmental Assessment Requirements – MP07-0174

Requirement	Description	Chapter / Section of Environmental Assessment
Water Quantity and Quality Impacts	<p>The EA must provide:</p> <ul style="list-style-type: none"> 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); 	<p>CA - Chapter 14 Section 14.6</p> <p>PA – Chapter 14 – Section 14.7 and 14.8</p>
	<ul style="list-style-type: none"> 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; 	<p>CA - Chapter 14 Section 14.6</p> <p>PA – Chapter 14 – Section 14.7</p>
	<ul style="list-style-type: none"> 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, <i>Drinking Water Catchments Regional Environmental Plan No. 1</i> specifies water quality criteria and specific heads of consideration; and 	<p>CA - Chapter 14 - Sections 14.5 - 14.7</p> <p>PA – Chapter 14 – Sections 14.5 – 14.8</p>

Summary of Chapter / Section of Marulan Gas Turbine Facilities Environmental Assessment that Director-General's Requirements are addressed

Joint Concept Approval Environmental Assessment Requirements – MP07-0174

Requirement	Description	Chapter / Section of Environmental Assessment
	<ul style="list-style-type: none"> a cumulative assessment of the hydrology impacts of the concept plan, in accordance with the <i>Floodplain Development Manual (2005)</i>, 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). 	<p>CA - Chapter 14 – Section 14.4</p> <p>PA – Chapter 14 – Sections 14.4 and 14.5</p>
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.	<p>CA - Chapter 7 – Sections 7.2 and 7.5</p> <p>PA – Chapter 7 – Section 7.2</p>
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 <i>Approved Methods for Modelling and Assessment of Air Pollutants in NSW</i> (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.	<p>CA - Chapter 7 – Section 7.3</p> <p>Chapter 3 – Sections 3.2.4 and 3.3.4</p> <p>PA – Chapter 7 – Section 7.3.6</p>

Summary of Chapter / Section of Marulan Gas Turbine Facilities Environmental Assessment that Director-General's Requirements are addressed

Joint Concept Approval Environmental Assessment Requirements – MP07-0174

Requirement	Description	Chapter / Section of Environmental Assessment
Noise Impacts	The EA must include a cumulative operational noise impact assessment for the concept plan, conducted in accordance with <i>NSW Industrial Noise Policy</i> (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 <i>Environmental Noise Control Manual</i> (EPA, 2004). Cumulative road transport noise would need to be assessed in accordance with <i>Environmental Criteria for Road Traffic Noise</i> (EPA, 1999). The EA must clearly outline the noise mitigation, monitoring and management measures for the concept plan.	CA - Chapter 8 -Sections 8.4 - 8.8 PA – Chapter 8 - Sections 8.6 and 8.7
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 <i>Guidelines for Threatened Species Assessment</i> (DEC, July 2005), considering all ancillary infrastructure and activities (including the pipe line corridor and bush fire set 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.	CA - Chapter 11 - Sections 11.4 – 11.7 PA - Chapter 11 – Sections 11.4 - 11.6
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.	CA - Chapter 12 - Sections 12.2.1, 12.5 – 12.9 PA – Chapter 12 – Sections 12.2.1, 12.4 - 12.6

Summary of Chapter / Section of Marulan Gas Turbine Facilities Environmental Assessment that Director-General's Requirements are addressed

Joint Concept Approval Environmental Assessment Requirements – MP07-0174

Requirement	Description	Chapter / Section of Environmental Assessment
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, 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.	CA – Chapter 15 - Sections 15.4 – 15.6 PA – Chapter 15 – Sections 15.4 and 15.5
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.	CA and PA – Chapter 1 – Section 1.6.5
Consultation Requirements		
Consultation	<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>	CA and PA - Chapter 6

Summary of Chapter / Section of Marulan Gas Turbine Facilities Environmental Assessment that Director-General's Requirements are addressed

EnergyAustralia Project Application– MP07-0175

Requirement	Description	Chapter / Section of Environmental Assessment
General Requirements		
Executive Summary	The Environmental Assessment (EA) must be prepared to a high technical and scientific standard and must include an executive summary.	Executive Summary
Description of the Concept Plan	The EA must include a description of the concept plan during construction and operation, demonstrating consistency with the scope and intent of the concept plan (MP 07_0174).	Chapter 4
Relevant Statutory provisions	The EA must include a consideration of any relevant statutory provisions including the consistency of the project with the objects of the <i>Environmental Planning and Assessment Act 1979</i> .	Chapter 5
Assessment of the key issues	The EA must include an assessment of the key issues (specified below), demonstrating consistency with the cumulative impact envelope of the concept plan (MP 07_0174) or where these are exceeded, clear identification of additional measures to manage, mitigate and/ or offset impacts.	Chapters 7, 8, 11, 12, 14 and 15
Draft Statement of Commitments	The EA must include a draft Statement of Commitments outlining environmental management, mitigation and monitoring measures; clearly identifying how these measures fit with the management/ monitoring strategies for the concept plan (MP 07_0174).	Chapter 19
Conclusion Justifying the Concept Plan	The EA must include a conclusion justifying the project demonstrating consistency with the cumulative impact envelope, site suitability and public interest outcomes of the concept plan (MP 07_0174).	Chapter 20
Certification	The EA must include a certification by the author of the EA that the information contained in the Assessment is neither false nor misleading.	Certificate of Validity
Key Assessment Requirements		
Water Quantity and Quality Impacts	The EA must identify the water use and sourcing requirements for the project demonstrating consistency with the water balance and water sourcing options identified in the concept plan (MP 07_0174). In addition, the EA must assess the project specific contribution to the cumulative water quantity, quality and hydrological impacts identified in the concept plan (MP 07_0174). The EA must identify measures for minimising, mitigating and/ or offsetting project-specific impacts, clearly demonstrating how these measures fit within the cumulative impact management and monitoring strategies for the concept plan (MP 07_0174).	Chapter 14 - Sections 14.6 – 14.7, 14.9

Summary of Chapter / Section of Marulan Gas Turbine Facilities Environmental Assessment that Director-General's Requirements are addressed

EnergyAustralia Project Application– MP07-0175

Requirement	Description	Chapter / Section of Environmental Assessment
Greenhouse Gases	The EA must assess the direct and indirect contribution of greenhouse gas emissions from the project to the cumulative impacts identified in the concept plan (MP 07_0174). The EA must identify how project specific offset measures fit within the cumulative offset strategies for the concept plan (MP 07_0174).	Chapter 7 - Sections 7.2 and 7.5
Air Quality Impacts	The EA must assess the operational air quality impacts of the project demonstrating no adverse impact on human health or the environment. The assessment must be undertaken in accordance with the <i>Approved Methods for Modelling and Assessment of Air Pollutants in NSW</i> (DEC, 2005), identifying project-specific contribution to cumulative emissions as identified in the concept plan (MP 07_0174) at a local, regional and interregional level, considering impacts during each phase of operation. The EA must clearly outline project-specific mitigation measures to be applied and the extent to which these measures are likely to be effective in achieving the relevant environmental outcomes. The EA must clearly demonstrate how these measures fit within the cumulative impact management and monitoring strategies for the concept plan (MP 07_0174).	Chapter 7 - Sections 7.3 and 7.5
Noise Impacts	The EA must assess the operational noise impacts of the project in accordance with <i>NSW Industrial Noise Policy</i> (EPA, 2000), identifying project-specific contribution to cumulative emissions as identified in the concept plan (MP 07_0174), considering impacts during each phase of operation and meteorological characteristic of the locality, which may exacerbate impacts. The EA must assess the construction and transport related noise impacts for the project in accordance with Chapter 171 of the <i>Environmental Noise Control Manual</i> (EPA, 2004) and <i>Environmental Criteria for Road Traffic Noise</i> (EPA, 1999), respectively, identifying project-specific contributions to cumulative emissions as provided in the concept plan (MP 07_0174). The EA must identify measures for minimising, mitigating and/ or offsetting project-specific impacts, clearly demonstrating how these measures fit within the cumulative impact management and monitoring strategies for the concept plan (MP 07_0174).	Chapter 8 - Sections 8.5 – 8.7
Flora and Fauna Impacts	The EA must assess flora and fauna impacts of the project, in accordance with <i>Guidelines for Threatened Species Assessment</i> (DEC, July 2005), identifying the project-specific contribution to the cumulative worst case impacts identified in the concept plan (MP 07_0174). The EA must detail how the mitigation and offset requirements for the project fit within the cumulative offset package for the concept plan (MP 07_0174), including performance monitoring and maintenance requirements.	Chapter 11 – Sections 11.4 – 11.6

Summary of Chapter / Section of Marulan Gas Turbine Facilities Environmental Assessment that Director-General's Requirements are addressed

EnergyAustralia Project Application– MP07-0175

Requirement	Description	Chapter / Section of Environmental Assessment
Indigenous Heritage	The EA must assess indigenous heritage impacts of the project, in accordance with <i>Guidelines for Aboriginal Cultural Impact Assessment and Community Consultation</i> (DEC, July 2005), identifying the project-specific contribution to the cumulative impacts identified in the concept plan (MP 07_0174). The EA must demonstrate that the consultation undertaken for the project is consistent with consultation undertaken for the concept plan (MP 07_0174). The EA must detail how the mitigation and offset requirements for the project fit within the cumulative impact management and monitoring strategies for the concept plan (MP 07_0174).	Chapter 12 - Sections 12.2.1 and 12.4 – 12.7
Hazards and Risk Impacts	The EA must include a Preliminary Hazard Analysis (PHA) of any potential offsite hazard and risk impacts that were identified in the concept plan (MP 07_0174). The PHA must be prepared in accordance with the Department's <i>Hazardous Industry Planning Advisory Paper No. 3, 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 confirmed with reference to the Department's draft <i>Route Selection</i> guideline.	Chapter 15 – Sections 15.4 and 15.5
General Environmental Risk Analysis	Notwithstanding the above key assessment requirements, the EA 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 EA.	Chapter 1 – Section 1.6.5

Summary of Chapter / Section of Marulan Gas Turbine Facilities Environmental Assessment that Director-General's Requirements are addressed

EnergyAustralia Project Application– MP07-0175

Requirement	Description	Chapter / Section of Environmental Assessment
Consultation Requirements		
Consultation	<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>	Chapter 6

Summary of Chapter / Section of Marulan Gas Turbine Facilities Environmental Assessment that Director-General's Requirements are addressed

Delta Electricity Project Application– MP07-0176

Requirement	Description	Chapter / Section of Environmental Assessment
General Requirements		
Executive Summary	The Environmental Assessment (EA) must be prepared to a high technical and scientific standard and must include an executive summary.	Executive Summary
Description of the Concept Plan	The EA must include a description of the concept plan during construction and operation, demonstrating consistency with the scope and intent of the concept plan (MP 07_0174).	Chapter 4
Relevant Statutory provisions	The EA must include a consideration of any relevant statutory provisions including the consistency of the project with the objects of the <i>Environmental Planning and Assessment Act 1979</i> .	Chapter 5
Assessment of the key issues	The EA must include an assessment of the key issues (specified below), demonstrating consistency with the cumulative impact envelope of the concept plan (MP 07_0174) or where these are exceeded, clear identification of additional measures to manage, mitigate and/ or offset impacts.	Chapters 7, 8, 11, 12, 14 and 15
Draft Statement of Commitments	The EA must include a draft Statement of Commitments outlining environmental management, mitigation and monitoring measures; clearly identifying how these measures fit with the management/ monitoring strategies for the concept plan (MP 07_0174).	Chapter 19
Conclusion Justifying the Concept Plan	The EA must include a conclusion justifying the project demonstrating consistency with the cumulative impact envelope, site suitability and public interest outcomes of the concept plan (MP 07_0174).	Chapter 21
Certification	The EA must include a certification by the author of the EA that the information contained in the Assessment is neither false nor misleading.	Certificate of Validity
Key Assessment Requirements		
Water Quantity and Quality Impacts	The EA must identify the water use and sourcing requirements for the project demonstrating consistency with the water balance and water sourcing options identified in the concept plan (MP 07_0174). In addition, the EA must assess the project specific contribution to the cumulative water quantity, quality and hydrological impacts identified in the concept plan (MP 07_0174). The EA must identify measures for minimising, mitigating and/ or offsetting project-specific impacts, clearly demonstrating how these measures fit within the cumulative impact management and monitoring strategies for the concept plan (MP 07_0174).	Chapter 14 - Sections 14.6 – 14.7, 14.9
Greenhouse Gases	The EA must assess the direct and indirect contribution of greenhouse gas emissions from the project to the cumulative impacts identified in the concept plan (MP 07_0174). The EA must identify how project specific offset measures fit within the cumulative offset strategies for the concept plan (MP 07_0174).	Chapter 7 - Sections 7.2 and 7.5

Summary of Chapter / Section of Marulan Gas Turbine Facilities Environmental Assessment that Director-General's Requirements are addressed

Delta Electricity Project Application– MP07-0176

Requirement	Description	Chapter / Section of Environmental Assessment
Air Quality Impacts	The EA must assess the operational air quality impacts of the project demonstrating no adverse impact on human health or the environment. The assessment must be undertaken in accordance with the <i>Approved Methods for Modelling and Assessment of Air Pollutants in NSW</i> (DEC, 2005), identifying project-specific contribution to cumulative emissions as identified in the concept plan (MP 07_0174) at a local, regional and interregional level, considering impacts during each phase of operation. The EA must clearly outline project-specific mitigation measures to be applied and the extent to which these measures are likely to be effective in achieving the relevant environmental outcomes. The EA must clearly demonstrate how these measures fit within the cumulative impact management and monitoring strategies for the concept plan (MP 07_0174).	Chapter 7 - Sections 7.3 and 7.5
Noise Impacts	The EA must assess the operational noise impacts of the project in accordance with <i>NSW Industrial Noise Policy</i> (EPA, 2000), identifying project-specific contribution to cumulative emissions as identified in the concept plan (MP 07_0174), considering impacts during each phase of operation and meteorological characteristic of the locality, which may exacerbate impacts. The EA must assess the construction and transport related noise impacts for the project in accordance with Chapter 171 of the <i>Environmental Noise Control Manual</i> (EPA, 2004) and <i>Environmental Criteria for Road Traffic Noise</i> (EPA, 1999), respectively, identifying project-specific contributions to cumulative emissions as provided in the concept plan (MP 07_0174). The EA must identify measures for minimising, mitigating and/ or offsetting project-specific impacts, clearly demonstrating how these measures fit within the cumulative impact management and monitoring strategies for the concept plan (MP 07_0174).	Chapter 8 - Sections 8.5 – 8.7
Flora and Fauna Impacts	The EA must assess flora and fauna impacts of the project, in accordance with <i>Guidelines for Threatened Species Assessment</i> (DEC, July 2005), identifying the project-specific contribution to the cumulative worst case impacts identified in the concept plan (MP 07_0174). The EA must detail how the mitigation and offset requirements for the project fit within the cumulative offset package for the concept plan (MP 07_0174), including performance monitoring and maintenance requirements.	Chapter 11 – Sections 11.4 – 11.6
Indigenous Heritage	The EA must assess indigenous heritage impacts of the project, in accordance with <i>Guidelines for Aboriginal Cultural Impact Assessment and Community Consultation</i> (DEC, July 2005), identifying the project-specific contribution to the cumulative impacts identified in the concept plan (MP 07_0174). The EA must demonstrate that the consultation undertaken for the project is consistent with consultation undertaken for the concept plan (MP 07_0174). The EA must detail how the mitigation and offset requirements for the project fit within the cumulative impact management and monitoring strategies for the concept plan (MP 07_0174).	Chapter 12 - Sections 12.2.1 and 12.4 – 12.7
Hazards and Risk Impacts	The EA must include a Preliminary Hazard Analysis (PHA) of any potential offsite hazard and risk impacts that were identified in the concept plan (MP 07_0174). The PHA must be prepared in	Chapter 15 – Sections 15.4 and 15.5

Summary of Chapter / Section of Marulan Gas Turbine Facilities Environmental Assessment that Director-General's Requirements are addressed

Delta Electricity Project Application– MP07-0176

Requirement	Description	Chapter / Section of Environmental Assessment
	accordance with the Department's <i>Hazardous Industry Planning Advisory Paper No. 3, 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 confirmed 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 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 EA.	Chapter 1 – Section 1.6.5
Consultation Requirements		
Consultation	<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>	Chapter 6



NSW GOVERNMENT
Department of Planning

Contact: Dinuka McKenzie
Phone: (02) 9228 6348
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Email: Dinuka.McKenzie@planning.nsw.gov.au

Our ref: 9042594
Your ref:

Ms Nicole Brewer
Associate Environmental Engineer
URS Australia Pty Ltd
Level 3, 116 Miller Street
NORTH SYDNEY NSW 2060

Dear Ms Brewer

Proposed Gas Fired Power Stations near Marulan, Upper Lachlan/Goulburn - Mulwaree Local Government Areas (MP 07_0174, MP 07_0175 and MP 07_0176)

The Department has received the joint concept plan application (MP 07_0174) by Energy Australia and Delta Electricity for the development of two gas-fired power stations and associated infrastructure near Marulan and well as the individual project applications by Energy Australia (MP 07_0175) and Delta Electricity (MP 07_0176), for their respective power stations on the site.

I have attached a copy of the Director-General's requirements (DGRs) for the preparation of an Environmental Assessment(s), for the concept plan and the two project applications for the respective power stations. These requirements have been prepared following the Planning Focus Meeting held on Tuesday 15 January 2008 and in consultation with the relevant government agencies.

It should be noted that the Director-General's requirements have been prepared based on the information provided to date. Under section 75F(3) of the Act, the Director-General may alter or supplement these requirements if necessary and in light of any additional information that may be provided prior to the proponent seeking approval for the Project.

I would appreciate it if you could contact the Department at least two weeks before you propose to submit the Environmental Assessment(s) for the proposal to determine:

- the fees applicable to the application;
- relevant land owner notification requirements;
- consultation and public exhibition arrangements that will apply;
- options available in publishing the Environmental Assessment via the Internet; and
- number and format (hard-copy or CD-ROM) of the Environmental Assessment(s) that will be required.

Prior to exhibiting the Environmental Assessment(s), the Department will review the document(s) to determine if it adequately addresses the DGRs. The Department may consult with other relevant government agencies in making this decision. If the Director-General considers that the Environmental Assessment(s) do not adequately address the DGRs, the Director-General may require the Proponent to revise the Environmental Assessment(s) to address the matters notified to the Proponent. Following this review period the Environmental Assessment(s) will be made publicly available for a minimum period of 30 days.

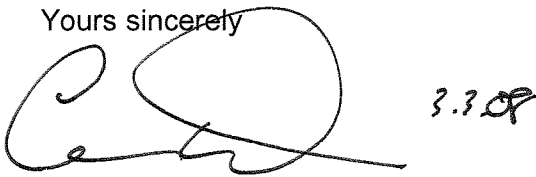
If your proposal includes any actions that could have a significant impact on matters of National Environmental Significance, it will require an additional approval under the

Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). This approval would be in addition to any approvals required under NSW legislation and it is your responsibility to contact the Department of the Environment, Heritage, Water and the Arts to determine if an approval under the EPBC Act is required for your proposal (6274 1111 or <http://www.environment.gov.au>).

Please note that the Commonwealth Government has accredited the NSW environmental assessment process for assessing impacts on matters of National Environmental Significance. As a result, if it is determined that an approval is required under the EPBC Act, please contact the Department immediately as supplementary Director-General's requirements will need to be issued.

If you have any enquiries about these requirements, please contact Ms Dinuka McKenzie, A/Senior Environmental Planning Officer, Major Infrastructure Assessments on 02 9228 6348 or via email (dinuka.mckenzie@planning.nsw.gov.au).

Yours sincerely

A handwritten signature in black ink, appearing to be 'C. Wilson', with a large loop at the end. To the right of the signature, the text '3.3.09' is handwritten.

Chris Wilson
Executive Director
As delegate for the Director-General

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	<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,

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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

	<p>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 <i>Environmental Noise Control Manual</i> (EPA, 2004). Cumulative road transport noise would need to be assessed in accordance with <i>Environmental Criteria for Road Traffic Noise</i> (EPA, 1999). The EA must clearly outline the noise mitigation, monitoring and management measures for the concept plan.</p> <ul style="list-style-type: none"> • 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 <i>Guidelines for Threatened Species Assessment</i> (DEC, July 2005), considering all ancillary infrastructure and activities (including the pipe line corridor and bush fire set 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. • 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>

Director-General's Requirements

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

Project	Construction and operation of a gas fired power station, comprising two open cycle gas turbines with a total capacity of 250-350 megawatts.
Site	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).
Proponent	Energy Australia
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 project during construction and operation, demonstrating consistency with the scope and intent of the concept plan (MP 07_0174); • consideration of any relevant statutory provisions including the consistency of the project with the objects of the <i>Environmental Planning and Assessment Act 1979</i>; • an assessment of the key issues specified below, demonstrating consistency with the cumulative impact envelope of the concept plan (MP 07_0174) or where these are exceeded, clear identification of additional measures to manage, mitigate and/ or offset impacts; • a draft Statement of Commitments outlining environmental management, mitigation and monitoring measures; clearly identifying how these measures fit with the management/ monitoring strategies for the concept plan (MP 07_0174); and • a conclusion justifying the project demonstrating consistency with the cumulative impact envelope, site suitability and public interest outcomes of the concept plan (MP 07_0174). • 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"> • Water Quantity and Quality Impacts – The EA must identify the water use and sourcing requirements for the project demonstrating consistency with the water balance and water sourcing options identified in the concept plan (MP 07_0174). In addition, the EA must assess the project specific contribution to the cumulative water quantity, quality and hydrological impacts identified in the concept plan (MP 07_0174). The EA must identify measures for minimising, mitigating and/ or offsetting project-specific impacts, clearly demonstrating how these measures fit within the cumulative impact management and monitoring strategies for the concept plan (MP 07_0174). • Greenhouse Gases – the EA must assess the direct and indirect contribution of greenhouse gas emissions from the project to the cumulative impacts identified in the concept plan (MP 07_0174). The EA must identify how project specific offset measures fit within the cumulative offset strategies for the concept plan (MP 07_0174). • Air Quality Impacts - the EA must assess the operational air quality impacts of the project demonstrating no adverse impact on human health or the environment. The assessment must be undertaken in accordance with the <i>Approved Methods for Modelling and Assessment of Air Pollutants in NSW</i> (DEC, 2005), identifying project-specific contribution to cumulative emissions as identified in the concept plan (MP 07_0174) at a local, regional and interregional level, considering impacts during each phase of operation. The EA must clearly outline project-specific mitigation measures to be applied and the extent to which these measures are likely to be effective in achieving the relevant environmental outcomes. The EA must clearly demonstrate how these measures fit within the cumulative impact

	<p>management and monitoring strategies for the concept plan (MP 07_0174).</p> <ul style="list-style-type: none"> • Noise Impacts – the EA must assess the operational noise impacts of the project in accordance with <i>NSW Industrial Noise Policy</i> (EPA, 2000), identifying project-specific contribution to cumulative emissions as identified in the concept plan (MP 07_0174), considering impacts during each phase of operation and meteorological characteristic of the locality, which may exacerbate impacts. The EA must assess the construction and transport related noise impacts for the project in accordance with Chapter 171 of the <i>Environmental Noise Control Manual</i> (EPA, 2004) and <i>Environmental Criteria for Road Traffic Noise</i> (EPA, 1999), respectively, identifying project-specific contributions to cumulative emissions as provided in the concept plan (MP 07_0174). The EA must identify measures for minimising, mitigating and/or offsetting project-specific impacts, clearly demonstrating how these measures fit within the cumulative impact management and monitoring strategies for the concept plan (MP 07_0174). • Flora and Fauna Impacts – the EA must assess flora and fauna impacts of the project, in accordance with <i>Guidelines for Threatened Species Assessment</i> (DEC, July 2005), identifying the project-specific contribution to the cumulative worst case impacts identified in the concept plan (MP 07_0174). The EA must detail how the mitigation and offset requirements for the project fit within the cumulative offset package for the concept plan (MP 07_0174), including performance monitoring and maintenance requirements. • Indigenous Heritage – the EA must assess indigenous heritage impacts of the project, in accordance with <i>Guidelines for Aboriginal Cultural Impact Assessment and Community Consultation</i> (DEC, July 2005), identifying the project-specific contribution to the cumulative impacts identified in the concept plan (MP 07_0174). The EA must demonstrate that the consultation undertaken for the project is consistent with consultation undertaken for the concept plan (MP 07_0174). The EA must detail how the mitigation and offset requirements for the project fit within the cumulative impact management and monitoring strategies for the concept plan (MP 07_0174). • Hazards and Risk Impacts – the EA must include a Preliminary Hazard Analysis (PHA) of any potential offsite hazard and risk impacts that were identified in the concept plan (MP 07_0174). The PHA must be prepared in accordance with the Department's <i>Hazardous Industry Planning Advisory Paper No. 3, 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 confirmed 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 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 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>

Director-General's Requirements

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

Project	Construction and operation of Stage 1 of Delta Electricity's gas fired power station development, comprising two open cycle gas turbines with a total capacity of 250-350 megawatts.
Site	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).
Proponent	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 project during construction and operation, demonstrating consistency with the scope and intent of the concept plan (MP 07_0174); • consideration of any relevant statutory provisions including the consistency of the project with the objects of the <i>Environmental Planning and Assessment Act 1979</i>; • an assessment of the key issues specified below, demonstrating consistency with the cumulative impact envelope of the concept plan (MP 07_0174) or where these are exceeded, clear identification of additional measures to manage, mitigate and/ or offset impacts; • a draft Statement of Commitments outlining environmental management, mitigation and monitoring measures; clearly identifying how these measures fit with the management/ monitoring strategies for the concept plan (MP 07_0174); and • a conclusion justifying the project demonstrating consistency with the cumulative impact envelope, site suitability and public interest outcomes of the concept plan (MP 07_0174). • 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"> • Water Quantity and Quality Impacts – The EA must identify the water use and sourcing requirements for the project demonstrating consistency with the water balance and water sourcing options identified in the concept plan (MP 07_0174). In addition, the EA must assess the project specific contribution to the cumulative water quantity, quality and hydrological impacts identified in the concept plan (MP 07_0174). The EA must identify measures for minimising, mitigating and/ or offsetting project-specific impacts, clearly demonstrating how these measures fit within the cumulative impact management and monitoring strategies for the concept plan (MP 07_0174). • Greenhouse Gases – the EA must assess the direct and indirect contribution of greenhouse gas emissions from the project to the cumulative impacts identified in the concept plan (MP 07_0174). The EA must identify how project specific offset measures fit within the cumulative offset strategies for the concept plan (MP 07_0174). • Air Quality Impacts - the EA must assess the operational air quality impacts of the project demonstrating no adverse impact on human health or the environment. The assessment must be undertaken in accordance with the <i>Approved Methods for Modelling and Assessment of Air Pollutants in NSW</i> (DEC, 2005), identifying project-specific contribution to cumulative emissions as identified in the concept plan (MP 07_0174) at a local, regional and interregional level, considering impacts during each phase of operation. The EA must clearly outline project-specific mitigation measures to be applied and the extent to which these measures are likely to be effective in achieving the relevant environmental outcomes. The EA must clearly demonstrate how these measures fit within the cumulative impact

	<p>management and monitoring strategies for the concept plan (MP 07_0174).</p> <ul style="list-style-type: none"> Noise Impacts – the EA must assess the operational noise impacts of the project in accordance with <i>NSW Industrial Noise Policy</i> (EPA, 2000), identifying project-specific contribution to cumulative emissions as identified in the concept plan (MP 07_0174), considering impacts during each phase of operation and meteorological characteristic of the locality, which may exacerbate impacts. The EA must assess the construction and transport related noise impacts for the project in accordance with Chapter 171 of the <i>Environmental Noise Control Manual</i> (EPA, 2004) and <i>Environmental Criteria for Road Traffic Noise</i> (EPA, 1999), respectively, identifying project-specific contributions to cumulative emissions as provided in the concept plan (MP 07_0174). The EA must identify measures for minimising, mitigating and/or offsetting project-specific impacts, clearly demonstrating how these measures fit within the cumulative impact management and monitoring strategies for the concept plan (MP 07_0174). Flora and Fauna Impacts – the EA must assess flora and fauna impacts of the project, in accordance with <i>Guidelines for Threatened Species Assessment</i> (DEC, July 2005), identifying the project-specific contribution to the cumulative worst case impacts identified in the concept plan (MP 07_0174). The EA must detail how the mitigation and offset requirements for the project fit within the cumulative offset package for the concept plan (MP 07_0174), including performance monitoring and maintenance requirements. Indigenous Heritage – the EA must assess indigenous heritage impacts of the project, in accordance with <i>Guidelines for Aboriginal Cultural Impact Assessment and Community Consultation</i> (DEC, July 2005), identifying the project-specific contribution to the cumulative impacts identified in the concept plan (MP 07_0174). The EA must demonstrate that the consultation undertaken for the project is consistent with consultation undertaken for the concept plan (MP 07_0174). The EA must detail how the mitigation and offset requirements for the project fit within the cumulative impact management and monitoring strategies for the concept plan (MP 07_0174). Hazards and Risk Impacts – the EA must include a Preliminary Hazard Analysis (PHA) of any potential offsite hazard and risk impacts that were identified in the concept plan (MP 07_0174). The PHA must be prepared in accordance with the Department's <i>Hazardous Industry Planning Advisory Paper No. 3, 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 confirmed 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 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 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>