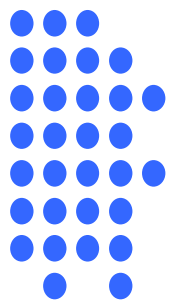


Appendix 2

Coverage of Government Agency Requirements in the *Environmental Assessment*



(No. of pages excluding this page = 8)

Table A2.1
Coverage of Government Agency Requirements in the *Environmental Assessment*

Page 1 of 8

Project Description	Assessment of Full Scale Gas Production	Coverage in Section(s)
Department of Planning		
General Requirements	An Executive Summary.	Page xi
	Description of the proposal.	3
	An assessment of environmental impacts focussing on key issues.	5
	Project justification including project benefits and impacts.	2 & 7
	Draft Statement of Commitments.	6
	Authors' Certification.	Page iii
Key Assessment Requirements	Strategic Justification	
	Strategic assessment of need, scale, scope and location of the Project (re: predicted electricity demand, transmission constraints, strategic direction re: electricity supply and demand and electrical generation technologies).	2
	Demonstration that gas resources exist to sustain expanded power generation.	2
	Details of licences, permits and approvals.	1.4
	Proposed routes for the gas gathering system.	3.2.1
	Describe land ownership, land use and land zoning.	5.1.4
	Assessment of potential land use conflicts (existing / future).	7.2.1.9
	Greenhouse Gas Impacts (Power Station Component)	
	Quantitative model recording GHG produced for each MWh of power produced (directly /indirectly).	SCSC Part 1 Section 7.1.5
	Predicted annual GHG production.	Table 5.9
	Predicted GHG production for life of the project.	SCSC Part 1 Section 7.1.5
	Express annual GHG produced compared with national and State GHG produced (over the life of the project).	5.2.2.4
	Provide comparison between proposed and alternative electricity generation technologies.	SCSC Part 1 Section 7.1.5
	Evaluate the feasibility of implementing additional measures to reduce GHG emissions.	SCSC Part 1 Section 7.3
	Describe and assess feasibility of a GHG offset, if applicable.	Not Applicable
	Air Quality (Power Station / Gas Infrastructure Components)	
	Assessment of air quality impacts as per DEC (2005).	5.2.1.1 & 5.2.1.5

Table A2.1 (Cont'd)
Coverage of Government Agency Requirements in the *Environmental Assessment*

Page 2 of 8

Project Description	Assessment of Full Scale Gas Production	Coverage in Section(s)
Department of Planning (Cont'd)		
Key Assessment Requirements (Cont'd)	Noise Impacts (All Project Components)	
	Assessment of residual noise impacts as per INP. (EPA, 2000).	5.9.4
	Assessment of construction noise as per ENCM (EPA, 2004).	5.9.4
	Description of noise mitigation, monitoring and management (and effectiveness).	5.9.3
	Ecological Impacts (Gas Infrastructure Components)	
	Flora and Fauna impact assessment as per guidelines – DEC (2005).	5.3 & 5.4
	Heritage Impacts (Gas Infrastructure Components)	
	Assessment of impacts on Aboriginal heritage as per guidelines – DEC (2005).	5.6
	Hazards and Risk Impacts (All Project Components)	
Consultation Requirements	Screening of potential hazards on site to assess potential for off-site impacts and need for Potential Hazard Analysis.	Appendix 3
	Potential Hazard Analysis, if required to be prepared as per Advisory Papers 3 and 6.	Not Required
	Environmental Risk Analysis (All Project Components)	
	Identify potential environmental impacts (before and after adoption of mitigation measures).	4.3.1
	Undertake an environmental impact of any key environmental impacts not already identified in DGRs, if relevant.	5
Consultation Requirements	- Results of Consultation with: - NSW Department of Environment and Climate Change; - Narrabri Shire Council; - Roads and Traffic Authority; - NSW Department of Primary Industries; - NSW Department of Water and Energy; - Civil Aviation Safety Authority; and - the local community.	4.2.2.3
		4.2.2.3
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		Appendix 5
		4.2.21

Table A2.1 (Cont'd)
Coverage of Government Agency Requirements in the *Environmental Assessment*

Page 3 of 8

Project Description	Assessment of Full Scale Gas Production	Coverage in Section(s)
Department of Environment and Climate Change		
Licencing	Environment Protection Licence required, if threshold levels exceeded.	3.3
Greenhouse Gas Emissions	Predicted Greenhouse Gas Emissions (unit / annual / lifetime).	Table 5.5
	Direct emissions.	5.2.2.3 & 5.2.2.4
	Indirect emissions.	5.2.2.4
	Upstream/downstream emissions.	5.2.2.4
	Comparison with 'best practice' emissions.	5.2.1.6
	Comparison with NSW annual totals.	5.2.2.4
	Evaluation of GHG emission reduction measures.	Table 5.10 & SCSC Part 1 Section 7.3
Air Quality	Address DEC Guidelines re: modelling and assessment of air pollutants.	5.2.1.1 & 5.2.1.5
	Assessment of key emissions (NO _x).	5.2.1.5 & 5.2.1.6
	NPI reporting and emissions minimisation.	Reporting Not Required
	Green offsets for residual impacts.	Not Applicable
	Compliance with Schedule 3 POEO (Clean Air) Reg 2002.	5.2.1.3 & SCSC Part 1 Section 4.2
	Compliance with Schedule 4 POEO (Clean Air) Reg 2002.	5.2.1.3 & SCSC Part 1 Section 4.2
	Dust management during construction.	5.2.1.4 & Table 5.3
	Air discharge points and Schedule 3/4 of POEO (Clean Air) Reg 2002.	Not Applicable
Noise and Vibration	Compliance with NSW INP.	5.9.4
	Consideration of adverse climatic conditions within INP.	5.9.4
	Assessment of adverse noise (design, construction, operation and maintenance) for power station.	5.9.4.2
	Assessment of adverse noise (design, construction, operation and maintenance) for pipeline.	5.9.4.1
	Assessment in accordance with <i>Environmental Criteria for Road Traffic Noise</i> .	5.9.4.3
Impacts on Water Quality / Quantity	No pollution of surface water and groundwater.	5.7 & 5.8
	Assessed in relation to ANZECC water quality criteria.	Not Required
	Sediment / erosion control in accordance Managing Urban Stormwater: Soils and Construction.	Not Required
Rehabilitation	Details of proposed rehabilitation strategy.	3.8
	Biodiversity offsets.	5.3.4

Table A2.1 (Cont'd)
Coverage of Government Agency Requirements in the *Environmental Assessment*

Page 4 of 8

Project Description	Assessment of Full Scale Gas Production	Coverage in Section(s)
Department of Environment and Climate Change (Cont'd)		
Waste Management & Chemicals	No waste disposal on site.	3.4.10 & 3.5.2.3
	Description of management strategies for treatment/disposal/utilisation of all liquid/solid wastes.	3.4.10 & 3.5.2.3
	Types, quantities and location of chemicals stored on site.	None Stored
	Spill management and emergency measures.	Not Required
Contaminated Land	Proposed assessment and management of any land contamination.	Not Applicable
Biodiversity Impacts	Documentation of ecosystems (vegetation as surrogate) impacted.	5.3.1
	Significance of impact for each community.	5.3.2
	Quantification of fragmentation and impacts of habitat reduction.	5.3.2
	Impacts on threatened species and communities.	5.3.5 & 5.4.4
	Specific considerations listed in Step 3 of the draft guideline.	5.3.5 & 5.4.4
	Field survey in accordance with draft guideline.	SCSC Part 2 Section 2.1, Part 3 Section 2.2
	Meets each of the key thresholds set out in Step 5 of the draft guideline.	5.3.5 & 5.4.4
	Potential effects of air emissions on threatened species and communities.	5.3.5 & 5.4.4
	Investigate preferential use of previously cleared corridors.	3.2.3.1
	Description of actions to avoid or mitigate impacts.	5.3.4 & 5.4.3
	Description of offsets to compensate biodiversity impacts.	5.3.6
	Effectiveness and reliability offsets evaluated and documented.	5.3.4
	Strategies to combine/consolidate offset areas in Narrabri/Gunnedah/Warrumbungle LGA's.	5.3.4
Aboriginal Heritage	EA as per Guidelines for Aboriginal Heritage Impact Assessment and Community Consultation.	5.6.1
	Identify the nature and extent of impacts on Aboriginal cultural heritage values across project area.	5.6.5
	Describe the actions to avoid or mitigate impacts.	5.6.10
	Clear demonstration of community consultation including PFAMC.	5.6.1
Department of Water and Energy		
Groundwater	Address relevant State Government Policies.	5.7
	Existing hydrogeological and water quality conditions.	5.7
	Capacity of land to accept/hold water in ponds.	Not Relevant

Table A2.1 (Cont'd)
Coverage of Government Agency Requirements in the *Environmental Assessment*

Page 5 of 8

Project Description	Assessment of Full Scale Gas Production	Coverage in Section(s)
Department of Water and Energy (Cont'd)		
Groundwater (Cont'd)	Potential for groundwater contamination.	5.7.2
	Requirements and procedures for groundwater protection.	5.7.3
	Groundwater monitoring requirements.	Not Applicable
	Contingency planning in the event of groundwater contamination.	Not Applicable
	Survey of water bores within 2km of development (purpose, status, potential impacts).	Not Relevant
Surface Water	Water requirements (volume, source, existing licences).	3.4.9.1
	Impacts of development on surface water including potential contamination.	5.8
Watercourses & Drainage Lines	Impacts on waterbodies and drainage lines in the area.	Not Applicable
Flooding	Impacts of development on flooding potential (roads, infrastructure).	Not Applicable
Development Structures	All designs for structures and associated infrastructure.	Not Relevant
Flora & Fauna	Assessment of Relevant Species listed on the <i>Threatened Species Conservation Act 1995</i> .	5.3.5, 5.4.1.4 & 5.4.4
	Assessment of Relevant Species listed on the <i>Fisheries Management Act</i> .	5.4.1.4, 5.4.4 & SCSC Part 2 Section 1.6
	Assessment of Relevant Species listed on the <i>Environment Protection and Biodiversity Conservation Act</i> .	5.4.1.4, 5.4.4 & SCSC Part 2 Section 1.6
Cultural Heritage	Aboriginal Heritage.	5.6
	European Heritage.	5.12
Environmental Management Plans	Monitoring, mitigation, rehabilitation.	1.7.2
	Erosion and sediment control.	5.8.3
Narrabri Shire Council		
General	Likely and potential impacts on Council infrastructure and need for upgrades or increased maintenance (management and funding).	Subject to Discussions
	Likely economic and social impacts with the locality and Shire.	4.2.2.4
	Availability of water for proposed development and impacts on resources and other users.	3.4.9.1
	Appropriate limitations to water use / access.	Not Relevant
	Management practices should the project require more water than originally anticipated.	3.4.9.1

Table A2.1 (Cont'd)
Coverage of Government Agency Requirements in the *Environmental Assessment*

Page 6 of 8

Project Description	Assessment of Full Scale Gas Production	Coverage in Section(s)
Narrabri Shire Council (Cont'd)		
General (Cont'd)	Probability of subsidence and proposed management and rehabilitation.	Not Applicable
	Risk assessment and measures to minimise / mitigate risk.	4.3.1
	Long-term and short-term residual impacts.	Section 5
	Consideration of alternatives to reduce impacts.	3.9
	Flora and Fauna.	5.3 & 5.4
	Long-term and short-term impacts on Flora and Fauna in Pilliga State Forest (population dynamics, species interactions, edaphic and microclimatic influences).	5.3 & 5.4
	Edaphic impacts (soil contamination, general soil impact assessment).	5.5.5 & 5.5.6
	Project impacts on microclimate.	5.2.3
	Impacts on function, suitability and capability of agricultural lands.	5.5.4
	Cultural heritage impact assessment.	5.6
	Impacts on land use and quality of life of adjoining owners / occupiers.	7.2.1.9
	Effectiveness of previous soil mitigation measures.	1.4
	Requirement for performance bonds.	Not Required
	Bushfire hazard.	5.3.4
	Flooding hazard.	Not Relevant
	Consideration of Council's Section 94 Contributions.	Not Applicable to Part 3A Projects
Roads and Traffic Authority		
General	Satisfaction of RTA Requirements for any works within the Newell Highway Corridor.	3.4.4
Department of Primary Industries		
General	Location of gas driven compression facility.	3.2.2
	Inclusion of Stage 2 production wells as project component.	2.4, 2.7 & 2.8
	Project justification in terms of ESD (also reflected in Statement of Commitments).	7.1.2
	Comprehensive description of all proposed activities from construction, production and rehabilitation.	Section 3
	Baseline environmental studies (meteorology, land capability / agricultural land suitability, ecology).	4.1, 5.3 & 5.4
Water Management	Detailed hydrogeological study of the impacted catchment (surface and groundwater).	5.7 & 5.8
	Management strategies and contingency plans for produced formation water.	Not Applicable
	Construction standards for any water management dams.	None Required
	Control and management of run-off water.	5.8

Table A2.1 (Cont'd)
Coverage of Government Agency Requirements in the *Environmental Assessment*

Page 7 of 8

Project Description	Assessment of Full Scale Gas Production	Coverage in Section(s)
Department of Primary Industries (Cont'd)		
Environmental Management and Impact Mitigation	Flood management strategies.	Not Applicable
	Topsoil/Erosion.	5.5 & 5.8
	Drill Cuttings.	Not Applicable
	Water.	5.7 & 5.8
	Dust.	5.2.1
	Noise.	5.9
	Greenhouse gases.	5.2.2
	Visual impacts.	5.11
Post-activity Land Use	Final land use options and preferred outcome.	7.2.1.9
	Justification of preferred final land use.	7.2.1.9
	Completion criteria to permit assessment of outcomes.	7.2.1.9
	Options for offsets.	Not Required
Exploration Activities	Identify and assess future exploration activities within PAL 2.	1.4
Safety Issues	Design, construction and installation of wellhead / gas gathering system devices meet Australian standards.	Noted
	Clear commitment to best practice operations of Wilga Park Power Station, gas gathering system and existing PPL3 operations.	Section 3
	Commitment to worker safety.	3.5.1 & 3.5.2
Sterilisation of Coal Resources	Provide details on how this issue will be managed.	Not Relevant
Specific Agricultural Issues	Groundwater monitoring to demonstrate no adverse impacts on the groundwater resource.	Not Relevant
	Management of waste products in order to prevent contamination of land.	3.4.10 & 3.5.2.3
	Management of visual impacts on heritage estates and landscapes.	5.11
	Production wells located in consultation with affected landholders to minimise adverse effects on farm operations.	Wells already positioned in consultation with NSW Forests
	Weed management and monitoring plans including washdown protocols.	5.3.4
	Water testing for stock watering or other intended uses.	3.4.9.1

Table A2.1 (Cont'd)
Coverage of Government Agency Requirements in the *Environmental Assessment*

Page 8 of 8

Project Description	Assessment of Full Scale Gas Production	Coverage in Section(s)
Department of Primary Industries (Cont'd)		
Specific Agricultural Issues (Cont'd)	Impacts on farm values, farm production and transfer of property ownership.	7.2.1.9
	Plans for progressive and final rehabilitation.	3.8
	The use of containment bunds to isolate the disturbed and working areas from adjoining lands.	Not Required
	Provision of stock exclusion fencing around work areas.	5.1.4.2
	Process for landholder compensation, including any bonds.	7.2.1.9
	Project to satisfy regional farmland objectives.	7.2.1.9
Fisheries Specific Issues	Proximity of development to watercourses and direct/indirect impacts on riparian/aquatic habitat.	5.8
	Nature and impacts on aquatic habitat of works (dredging, trenching, directional drilling).	3.4.3
	Duration and timing of works.	3.6.1
	Proposed mitigation measures to protect riparian/aquatic habitat.	5.8
	Waterway crossings compliant with policy on fish passage requirements.	Not Applicable
	Outline permanent or temporary measures that will block fish passage.	Not Applicable
	Potential impacts on threatened/protected species listed under <i>Fisheries Management Act</i> .	Not Applicable
Fisheries General Issues	Preparation as outlined in Guidelines for the Assessment of Aquatic Ecology in EIA.	Not Applicable
DPI General Requirements (only relevant requirements included)	All waterbodies identified.	5.8
	Description of aquatic vegetation, snags, gravel beds and protected, threatened, dominant habitats.	Not Applicable
	Land tenure details.	5.1.4.1
	Hydrological and stream morphology, flow characteristics, seasonal variations, bed substrate, bed width.	5.8
Forests NSW Issues	Access and compensation agreements for proposed activity.	7.2.1.9
	Maintenance of current standard of roads and tracks.	5.10.4
	Construction of new roads or tracks to prevailing standards.	3.8.1.1
	Implications for bush fire fighting and public safety during construction, operation and rehabilitation.	5.3.4 & 5.10.4
	Salvage of merchantable timber.	3.4.2
	Rehabilitation of productive capacity.	3.8.1.1
	Right of Forests NSW to seek alteration to location.	4.2.2.3

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