

DEPARTMENT OF PLANNING AND INFRASTRUCTURE

Development Assessment and Systems Performance

NARRABRI GAS UTILISATION PROJECT (WILGA PARK POWER STATION)

PURPOSE

To determine a modification request for the Narrabri Gas Utilisation Project (Wilga Park Power Station).

BACKGROUND

- Eastern Star Gas Limited (ESG) (a Santos Limited Company and the Proponent) operates the coal-seam methane-fired Wilga Park Power Station south-west of Narrabri, in the Narrabri local government area (map at Tag B).
- On 2 December 2008, a Major Project application (MP07_0023) was approved to expand the power station and utilise the coal-seam methane gas generated from the existing testing wells at the company's Bibblewindi and Bohena Gas Pilot Projects located approximately 30 km south of the power station (Tag E).
- The Major Project approval consisted of the:
 - o Construction and operation of gas gathering systems at the Bibblewindi and Bohena Coal Seam Gas Pilots;
 - o Construction and operation of two gas compression facilities at the Bibblewindi and Bohena Coal Seam Gas Pilots;
 - o Construction of an approximately 32 kilometre buried gas flow line between the Bibblewindi and Bohena Pilots and the Wilga Park Power Station; and
 - o The staged expansion and operation of the Wilga Park (base load) gas-fired power station from a capacity of 12 megawatts to 40 megawatts, fuelled by coal seam gas extracted from the Bibblewindi and Bohena Coal Seam Gas Pilots.
- Water is produced by coal seam gas mining operations as a result of the hydraulic fracturing process. This was detained in ponds for treatment, prior to release into Bohena Creek. However due to the concern about the impact of discharges, release of the water has ceased. Consequently coal seam gas extraction has ceased until an Environment Protection Licence (EPL) is obtained and a new water treatment plant is operating. The EPL will enable water discharge to recommence, however until then, the aim is to avoid any discharge from the Bibblewindi pond.
- As part of a produced water contingency plan for Bibblewindi Pond 3, the proponent is seeking to transfer 60ML of lifted water from Bibblewindi Pond 3 to Tinsfield Pond 2. This is to ensure sufficient storage capacity is available at Bibblewindi Pond 3 to avoid a potential overflow of lifted water into Bohena Creek (map at Tag B).
- The Bibblewindi Pond 3 water line is currently within 40cm of the overflow pipe. There is a concern that heavy rainfall could cause an overflow. Tinsfield Pond 2 can hold 80ML and currently has spare capacity.
- ESG proposes that the gas pipeline will temporarily transfer water between the ponds until discharges can recommence. To enable the existing gas pipeline to

be utilised for the transfer of water, the proponent would draw as much gas from the pipeline into the Wilga Park Power Station as possible. What gas remains in the pipeline will be vented through temporary HDPE piping at Tintsfield Pond 2 to allow the transfer.

- It is proposed that the water will be transferred back from Tintsfield to Bibblewindi via the pipeline following further investigation into long term water management options. Following this the existing pipeline will be flushed with fresh water and the aboveground sections dosed with biocide, previously approved for use.
- If approved the transfer process is estimated to take 3 weeks to set up and 4 weeks to transfer the 60ML.
- On 22 February 2012 a separate application was approved under part 5 of the *Environmental Planning and Assessment Act, 1979* (EP&A Act) by the Department of Trade and Investment (Tag C). It involves the act of transferring the water from Bibblewindi Pond 3 to Tintsfield Pond 2 and the construction of temporary HDPE transfer lines at either end of the existing gas pipeline.

PROPOSED MODIFICATION

- On 6 February 2012, the Proponent submitted a request for a modification under 75W of the EP&A Act (Tag D).
- In accordance with clause 3 of Schedule 6A of the EP&A Act, section 75W of the Act as in force immediately before its repeal on 1 October 2011 and as modified by Schedule 6A, continues to apply to transitional Part 3A projects.
- Consequently, this report has been prepared in accordance with the requirements of Part 3A and associated regulations, and the Minister (or his delegate) may approve or disapprove of the carrying out of the project under section 75W of the Act.
- The modification request seeks to change the use of the existing gas pipeline to permit the pipeline to temporarily transfer water from Bibblewindi, through the existing gas pipeline subject of this application, to Tintsfield. The water will be transferred back to Bibblewindi once a new treatment plant is in place and an EPL is obtained.
- This requires the modification of dot point 3 of the project description from:
 - o "construction of an approximately 32 kilometre buried gas flow line between Bibblewindi and Bohena Pilot and the Wilga Park Power Station" to,
 - o "construction and operation of an approximately 32 kilometre buried gas **and/or water** flow line between Bibblewindi and Bohena Pilot and the Wilga Park Power Station".
- This also requires the inclusion of a condition to ensure the temporary nature of the water transfer and the amendment of the terms of approval to include the Review of Environmental Factors submitted as part of the modification application.

CONSULTATION

- In accordance with section 75X of the EP&A Act and clause 8G of the EP&A Regulation, the modification request was made available on the Department's website. Due to the minor nature of the proposed modification, the modification request was not exhibited by any other means. No public submissions were received on the modification request.

- The Environment Protection Authority, NSW Office of Water, Narrabri Shire Council and NSW Trade and Investment were invited to comment on the modification.
- The Environment Protection Authority commented on the assessment of noise for the components of the project being assessed under the separate Part 5 application by NSW Trade and Investment.
- NSW Office of Water commented on site rehabilitation, construction of the temporary HDPE piping to transfer the lifted water, and the integrity of the temporary piping for the transfer. These issues are related to the Part 5 Application, which has been determined by NSW Trade & Investment.
- The Resource and Energy branch of Trade and Investment provided comment that the modification is supported as it will allow more efficient water management from coal seam gas mining and also provide a short term emergency response from the region's unseasonably high rainfall.
- Narrabri Shire Council did not make a submission.

DELEGATED AUTHORITY

- On 14 September 2011, the Minister for Planning and Infrastructure delegated his approval functions under Section 75J of the EP&A Act to the Planning Assessment Commission (PAC) in the cases where applications have been made by private companies (including reportable political donation applications).
- The Proponent is a private company and has provided, with its modification application for the subject proposal, a statement indicating it has made a reportable political donation. Consequently, pursuant to the Minister's delegation of 14 September 2011, the modification application is subject to determination by the PAC.

KEY ISSUES

- The Department's Major Hazards Unit was consulted and found SEPP 33 would not be triggered and that the transfer of water would reduce the overall risk compared to normal Coal Seam Gas operations. Hazards also confirmed that there are no risks associated with the pipeline's future conversion back to gas transportation.
- Air compressors will be used to 'pig' the existing pipeline before and after the water transfer. This is a pipeline cleaning method.
- The Department is satisfied the proponent has adequately assessed the potential impacts of the project and is satisfied that the change of use of the existing gas pipeline to allow the transfer of water and preparation for the future reuse of the pipe for gas does not present any hazard related issues which preclude approval of the modification.
- The Department has recommended a condition that ensures the temporary nature (up until 28 February 2013, which is consistent with the Part 5 approval issued by the Department of Trade and Investment on 22 February 2012) of the change of use of the pipe to allow the transfer of water.

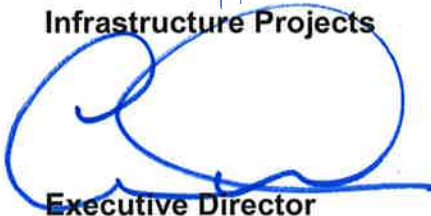
RECOMMENDATION

- The Department considers that the modification is in the public interest, as it is to prevent discharge of coal seam gas water from the Bibblewindi Pond 3 into the Bohena Creek.
- The Department recommends that the Planning Assessment Commission consider the findings and recommendations of this report and determine to approve the project, subject to the recommended conditions.

Approved by:

Nalla Orlome

A/Director 7/3/12
Infrastructure Projects



Executive Director
Major Projects Assessment

11.3.12

Deputy Director-General
Development Assessment & Systems Performance

Modification of Minister's Approval

Section 75W of the *Environmental Planning & Assessment Act 1979*

As delegate of the Minister for Planning and Infrastructure under delegation from the Minister enforced from 1st October, 2011, the Planning Assessment Commission of New South Wales (**the Commission**) approves the project application referred to in Schedule 1, subject to the conditions specified in Schedule 2.

These conditions are required to:

- prevent, minimise, and/or offset adverse environmental impacts;
- set standards and performance measures for acceptable environmental performance;
- require regular monitoring and reporting; and
- provide for the ongoing environmental management of the project.

Member of the Commission

Member of the Commission

Member of the Commission

Sydney

2012

SCHEDULE 1

Project Approval:

MP07_0023 granted by the Minister for Planning on 2 December 2008

For the following:

The Narrabri Coal Seam Gas Utilisation Project comprising the construction and operation of gas gathering systems, gas compression facilities, a 32 kilometre buried gas flow line and expansion and operation of the Wilga Park gas fired power station.

Modification:

MP07_0023 (Mod2): To modify the approval to allow the temporary use of the gas pipeline for the transfer of water.

SCHEDULE 2

CONDITIONS

Delete the paragraph 'Project' from Schedule 1: Project description and replace with:

- Project:** The Narrabri Coal Seam Gas utilisation project, comprising the:
- construction and operation of gas gathering systems at the Bibblewindi and Bohena Coal Seam Gas Pilots;
 - construction and operation of gas compression facilities at the Bibblewindi and Bohena Coal Seam Gas Pilots;
 - construction and operation of an approximately 32 kilometre buried gas and/or water flow line between the Bibblewindi and Bohena Pilot and the Wilga Park Power Station; and
 - the staged expansion and operation of the Wilga Park (base load) gas-fired power station from a capacity of 12 megawatts to 40 megawatts, fuelled by coal seam gas extracted from the Bibblewindi and Bohena Coal Seam Gas Pilots.

Delete condition 1.1 g) and replace with

1.1 g) *Review of Environmental Factors – Temporary Lifted Water Management – Bibblewindi Pond 3* prepared by RPS Australia East Pty Ltd for Eastern Star Gas Limited (A Santos Limited Company) and dated 25 January 2012; and

h) the conditions of this approval.

Delete condition 1.2 and replace with

1.2 In the event of an inconsistency between:

- a) the conditions of this approval and any document listed from condition 1.1a) and 1.1g) inclusive, the conditions of this approval shall prevail to the extent of the inconsistency; and
- b) any document listed from condition 1.1a) and 1.1g) inclusive, and any other document listed from condition 1.1a) and 1.1g) inclusive, the most recent document shall prevail to the extent of the inconsistency.

Insert after condition 1.4

1.4 A. The pipeline may be utilised for the transfer of water up until the 28 February 2013.

