

# **WILGA PARK POWER STATION**

## **Annual Environmental Management Report**

### **Approval 07-0023**

**For period 1 January 2014 to 31 December 2014**

**Submitted by Santos NSW (Eastern) Pty Ltd as CSG Operator**

---

## Table of Contents

1.	Introduction .....	4
2.	Approvals .....	4
3.	Gas Production, Water Management. and Power Outputs .....	7
3.1	Gas .....	7
3.2	Power .....	7
4.	Compliance .....	8
4.1	Operation Environmental Management Plan .....	9
4.2	Environmental Incidents .....	9
4.3	Complaints .....	9

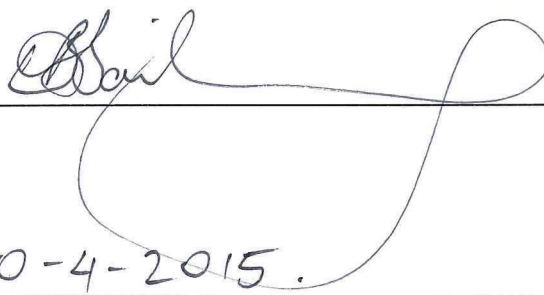
## Table of Figures

Figure 1: Location of the Wilga Park Power Station and Pipeline including CSG infrastructure .....	6
--	---

## Declaration

Santos NSW (Eastern) Pty Ltd declares the information contained within this document has been prepared and collated from all relevant information and is, to the best of our knowledge neither false nor misleading.

Submitted by: David Bailey, ENSW Manager Operations

  
Signature

10-4-2015.  
Date

## 1. Introduction

This Annual Environmental Management Report (AEMR) has been prepared for submission to the NSW Department of Planning and Environment (DPE) by Santos NSW (Eastern) Pty Ltd to satisfy commitment 11.7 in the Final Statement of Commitments made by the previous operator Eastern Star Gas (ESG) for the Narrabri Coal Seam Gas Utilisation Project (Project). ESG submitted the original Project Application 07-0023 in early 2007 with the approval being granted by DPE in December 2008 (Approval Doc. No. S07/00277). There was no specific obligation in the conditions of approval for the submission of an Annual Environmental Management Report.

## 2. Approvals

Wilga Park Power Station was originally constructed and operated pursuant to a development consent granted by Narrabri Shire Council on 14 November 2002 and subsequent modifications. The consent and modifications allowed the power station to operate up to a capacity of 12 megawatts using gas extracted from the Coonarah Gas Field in PPL 3.

On 2 December 2008, the Minister for Planning approved the Narrabri CSG Utilisation Project under Part 3A of the *Environmental Planning and Assessment Act 1979* (EP&A Act) (MP 07\_0023).

The approved project includes:

- 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 of an approximately 32 kilometre buried gas 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.

Construction works under the Part 3A approval commenced in 2009. Further works continued during 2010-2012. The works which have been undertaken under the approval to date include:

- construction of the gas gathering systems at the Bibblewindi and Bohena CSG Pilots;
- construction of the gas compression facilities for the Bibblewindi and Bohena CSG Pilots;
- construction of the 32 kilometre buried gas flow line between the Bibblewindi and Bohena pilots and the Wilga Park Power Station; and



- installation of 4 x 3MW gas generators at Wilga Park Power Station together with switch room, gas conditioning skid, auxiliary transformers, ventilation fans, substation upgrade and other related equipment.

The Minister for Planning approved a modification to the Narrabri CSG Utilisation Project on 11 February 2011 (MP 07\_0023 MOD 1). The modification changed condition of approval (CoA) 2.34 relating to the submission date for the compensatory habitat package required.

A further modification to the project was approved on 14 March 2012 (MP 07\_0023 MOD 2) allowing the temporary use of the gas flow line to transfer produced water. The approval for this modification allowed the transfer of water until 28 February 2013.

On 18 July 2014, the Wilga Park Power Station (WPPS) was approved to receive gas from all wells located within PAL 2 and PPL 3 following the application of Santos Narrabri Coal Seam Gas Utilisation Project (MP 07\_0023) Modification 3. The approval allowed for:

1. Installation of a riser on the existing buried gas flow line which would allow materials (gas and liquids) to be diverted to the Leewood Produced Water Facility;
2. Use of the gas flow line to transfer liquids (including fresh water, produced water and brine) between the Tintfield ponds and the Bibblewindi Water Transfer facility and to the Leewood Produced Water Facility; and
3. Use of coal seam gas from existing or future wells within PAL 2 or PPL 3 at the Wilga Park Power Station.

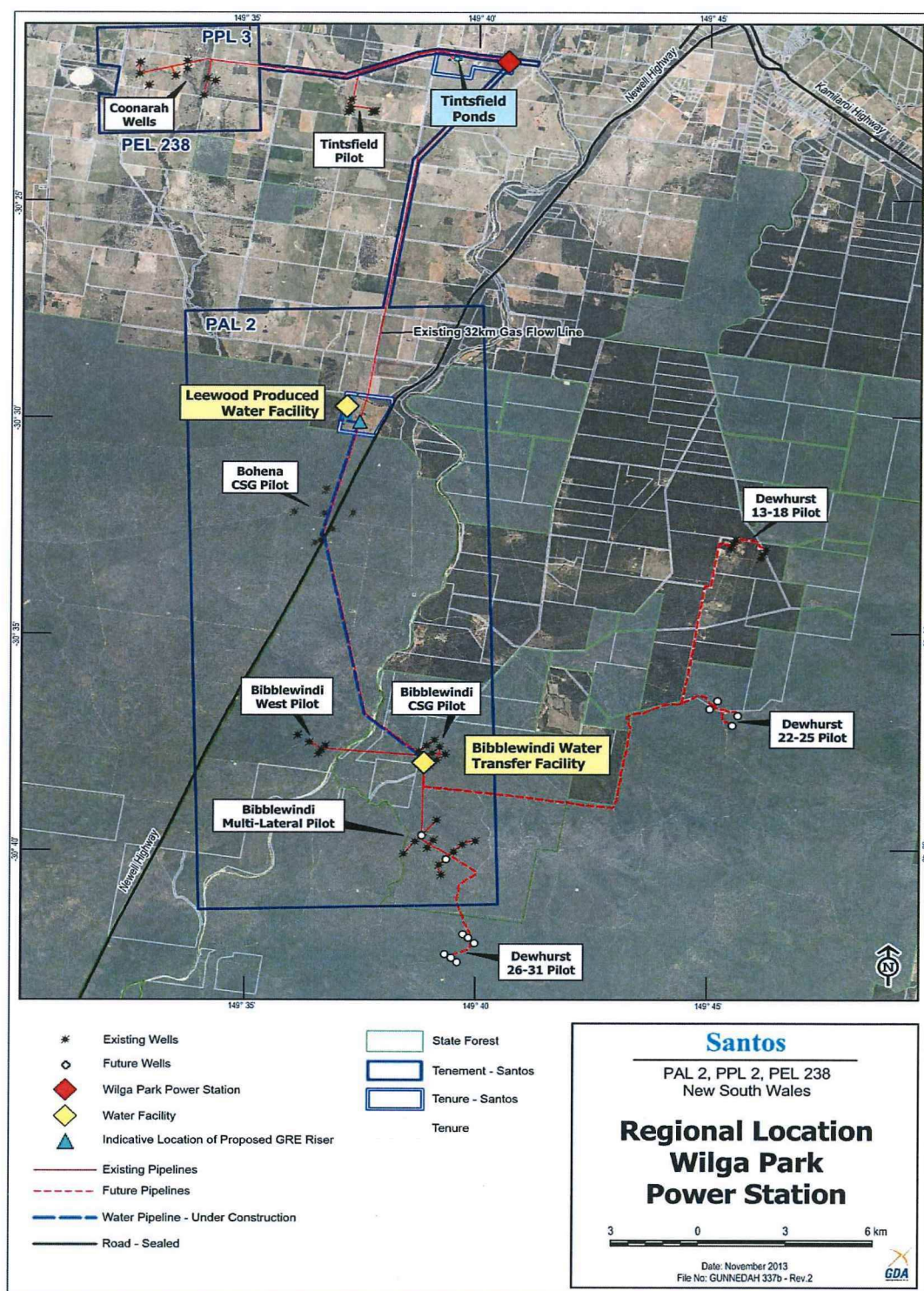


Figure 1: Location of the Wilga Park Power Station and Pipeline including CSG infrastructure



### 3. Gas Production, Water Management. and Power Outputs

The Wilga Park Power Station was non-operational from March 2012 to February 2014, as a result of the wells in the Narrabri Gas field being shut in. In 2014, the power station became operational again, in 2 stages. Recommencement testing took place February –April 2014, and the power station became fully operational again in October 2014. The reason for the two stages was to use the gas flow line to transfer produced water from the Tintsfeld ponds back to Bibblewindi. The water transfer enabled cleaning of the liner to occur in Tintsfeld Pond 2 and allow subsequent inspections of the liner and repairs to be conducted.

The gas flow pipeline was prepared and cleaned out for use in transporting water from the Tintsfeld storage ponds to Bibblewindi Pond 3. In August 2014, the water transfer was conducted and the gas flow pipeline was again cleaned following the transfer event ready for the transportation of gas from the Bibblewindi Facilities Area.

#### 3.1 Gas

Gas produced from the PAL 2 pilots is consumed by onsite power generation for surface equipment (minor) with the remaining gas either being flared at the Bibblewindi Flare or discharged into the Bibblewindi-Wilga Park pipeline which connects to the Wilga Park Power Station.

Bibblewindi West pilot recommenced operating in April 2014 with 47,960 mscf of gas being lifted for appraisal activities in 2014. Bibblewindi East pilot recommenced in March 2014 with 233,194 mscf of gas being lifted for appraisal activities.

No gas was lifted from the Bohena, Bibblewindi or the Coonarah Pilots in 2014.

#### 3.2 Power

The following describes the power station activities undertaken in 2014:

Gen-01A became operational in April 2014 for a short time to undergo start up testing. It was then shut down to allow for the gas flow pipeline to be utilised for the water transfer in accordance with MP 07\_0023 Modification 3.

Gen-01A was again restarted in September 2014 following the water transfer. Gen-02A was restarted in September 2014.

Gen-04B (3MW) was installed by the previous operator, Eastern Star Gas Ltd in 2011. In January 2014, pre-commissioning activities commenced on Gen-04B. In late January 2014, an internal final assessment was conducted using Santos' handover process which is a final assessment of the equipment to ensure that it is ready for operation. All commissioning activities were complete in early February 2014. Gen-04B is currently not in operation.

Switchboard and switchgear testing commenced for Gen-03B and Gen-04B in October 2014 prior to the commencement of commissioning works for Gen-03B. On 12 October testing and commissioning was completed for Low Voltage (LV)/ High Voltage (HV) breakers.

Gen-03B was installed by the previous operator Eastern Star Gas Ltd 2010-11, but not commissioned. Pre-commissioning activities started in early October 2014 with commissioning works beginning in mid-October 2014. An internal check and handover to the operations team was conducted using Santos' handover process. This process was completed in early November 2014. The generator is now fully commissioned and ready to operate. Gen-03B is currently not in operation.

In 2014, the Wilga Park Power Station generated 14.868 GW of electricity from the gas produced in PAL2. The power generation never exceeded 12MW at any time.

#### 4. Compliance

Santos has in place a compliance management system to monitor its performance against conditions of approval. Inspections are scheduled through a corporate database (ComTrack). Results of inspections are also recorded in this database.

Conditions which are triggered once the Power Station output reaches 12 megawatts are outlined in the Santos Compliance Tracking tool – ComTrack. Planning and scheduling for these actions is underway even though the triggering of this threshold is not anticipated in the near future. WPPS has not exceeded threshold of 12MW which triggers a number of environmental conditions within Approval 07\_0023.

In September 2014, approval was sought from DPE to nominate a new Independent Environmental Representative. This was due to the previous representative CDB Environmental relocating out of Australia. The newly nominated Independent Environmental Representative is Lodestone Environmental Services. Approval for this nomination was received from DPE in October 2014.



## 4.1 Operation Environmental Management Plan

In 2014 Santos has updated the previous Operation Environmental Management Plan. This was reviewed by the approved Independent Environmental Representative, Mr Les Bevis of Lodestone Environmental Services. Vehicle access tracks are being maintained along the Right of Way (ROW) with the remainder of the ROW under re-vegetation. The ROW runs from the Bibblewindi Facilities Area to the WPPS. In the section of the ROW from Bibblewindi to Leewood, installation of a water flowline commenced in September 2013, and was completed in 2014. These works were approved as part of a Review of Environmental Factors for the Leewood Water Management Facility. This installation required the ROW to be cleared of all vegetation. It has since been reinstated as per the requirements of the Operations Environmental Management Plan (OEMP). In accordance with the OEMP, an environmental inspection of the ROW is conducted once every quarter. Any corrective actions such as weed management are then initiated.

The native tree plantation located on the western boundary of the Wilga Park property was originally planted in April 2012 to create visual screen for the neighbouring residence. General maintenance and watering was conducted on the native tree plantation in 2014 with the objective of developing a self-sustaining vegetation community to give an enduring screen.

## 4.2 Environmental Incidents

No environmental incidents were recorded in 2014.

## 4.3 Complaints

No complaints were received by Santos in 2014 in relation to the operation of the Wilga Park Power Station.

**END OF REPORT**