

**TRADE & INVESTMENT,  
REGIONAL INFRASTRUCTURE & SERVICES  
Resources & Energy**

**Director General Briefing**

**INQUIRY INTO COAL SEAM GAS  
MONDAY 12 DECEMBER 2011**

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**PURPOSE:**

Response to Questions on Notice taken at the Inquiry into Coal Seam Gas on 12 December 2011.

**BACKGROUND:**

At the Inquiry into Coal Seam Gas on 12 December 2011, the Executive Director Mineral Resources, took a number of questions on notice.

Questions were referred to various areas for response.

**COMMENT:**

A list of questions and suggested responses is attached at Tab 1.

**RECOMMENDATION(S)**

The Director General approves the release of this information.

BOM Member:  
Executive Contact:

Mark Duffy  
Brad Mullard

02 8281 7402  
02 49316404

*Endorsed B Mullard 3/2*  
Executive Director Mineral Resources

3 FEB 2012

*MJG*  
Deputy Director General Resources and Energy

*Christopher*  
Director General  
6/2/12

## **QUESTION WITH NOTICE:**

**Date Asked:** 12 December 2011

### **QUESTION**

**Have any (petroleum exploration licences) fallen due in that time?**

### **ANSWER**

17 petroleum exploration licences fell due (reached their expiry date) between the 26 March and 21 December 2011.

### **QUESTION**

**Would you be able to take that on notice and give some information, as I say, in general terms. Obviously we do not want specific information about every aquifer. They gave evidence to us that the aquifers in that area are relatively shallow and are sitting virtually right on top of the coal seams. That is the information that I am particularly interested in. This may be a question for Mr Mullard. The Camden gas field is the only operating production lease in New South Wales. I think that has been approved for about ten years. Is that correct?**

### **ANSWER**

The first petroleum production leases granted in the Camden area were granted in September and October 2002.

### **QUESTION**

**Hon Jeremy Buckingham – question to Mr Mullard. The Government announced an extension to the fracking moratorium. Could you provide the details of the review including the terms of reference for the review, who is undertaking the review, the resources available to undertake the review, and a copy of the document, email or letter requesting the review be undertaken.**

### **ANSWER**

A review of fracking standards was undertaken by Campbell Macpherson Pty Ltd and is currently being reviewed by the NSW Chief Scientist and Engineer, Professor Mary O'Kane, prior to implementation.

The review considers Australian material particularly Queensland, as well as overseas standards (notably the USA and Canada). This review is also identifying risks to be addressed by particular standards and will recommend a framework for future actions.

**Terms of reference for the review undertaken by Campbell Macpherson:**

- Review existing domestic and international, government and industry fracking standards:
  - Identify relevant standards
  - Review existing standards - to manage health, safety and environmental risks



- Identify existing best practice regulatory standards where possible which address risks associated with fracking CSG wells in the NSW context.
- Where an appropriate standard does not exist, identify as far as possible the gap.
- In consultation with the Department, consult with relevant technical and industry experts and stakeholders as agreed.
- Prepare, as required by the Department, interim briefing papers for the Coal Seam Gas Working Group
- Prepare a written report covering the identification and review of relevant standards, and recommended standards.

There is a Contract for Services dated 27 September 2011 between Campbell Macpherson Pty Ltd and the Department of Trade and Investment, Regional Infrastructure and Services. A copy of the contract is attached. (TAB A).

## **QUESTION**

**The Hon. JEREMY BUCKINGHAM:** I am not sure whether the Government or the department keeps this information on hand but could you provide the Committee with a list of all coal seam gas wells that have been fracked in New South Wales including the company undertaking the activities, the well location, date of fracking and the volume of chemicals used?

**Does the Government keep an inventory of all the wells that have been fracked?**

## **ANSWER**

Attached are Departmental records of coal seam gas wells under petroleum titles which have been hydraulically fractured (TAB B). While these records are believed to be complete, different reporting arrangements have been in place since petroleum drilling commenced in NSW in 1904 and the Department cannot guarantee the completeness of this information.

The volume of chemicals used in the fracking procedure is not required to be disclosed by companies and is therefore not generally available. This information will be required with the commencement of the new Environmental Impact Assessment Guidelines and the completion of the independent review of fracking standards process.

An inventory of wells where hydraulic fracturing has been undertaken is held by Government. Attached is a map of the location of fracked wells (TAB C).

## **QUESTION**

**The Hon. JEREMY BUCKINGHAM:** Has this Government approved any coal seam gas activities in the special catchment areas of the Sydney drinking water supply?

**Mr MULLARD:** I am not aware of any, but I would have to take that on notice. I cannot guarantee that.



**The Hon. JEREMY BUCKINGHAM:** I am aware that they recently approved the drilling of the apex bore hole and additional bore holes as a modification of the consent. Are you aware of the submission that the catchment authority made on that modification application?

**Mr MULLARD:** I am personally not aware of it, no.

**The Hon. JEREMY BUCKINGHAM:** In it they said that they were opposed to the application for modification of consent because the test they were applying, which is written into the statute, was that any activity in that area has to be neutral or beneficial. Is it the Government's position that coal seam gas is neutral or beneficial in our special catchment areas?

**Mr PATERSON:** I think Mr Mullard has already indicated that he is not aware of the facts of that particular application. So we will take the question on notice.

#### **ANSWER**

The NSW Government has stringent approval and environmental management requirements for coal seam gas exploration. The NSW Office of Environment and Heritage, NSW Office of Water and the Sydney Catchment Authority (SCA) (where applicable), are consulted as part of the assessment process for coal seam gas exploration. The SCA actively participates in the assessment and approval process for mineral and petroleum exploration and extraction applications in the Sydney drinking water catchments.

The SCA has a statutory responsibility to protect drinking water catchments that supply Sydney, the Blue Mountains, Illawarra, Shoalhaven and the Southern Highlands.

In January 2011 Apex Energy NL submitted a project modification, to the former Department of Planning, to its approval to undertake a 15 borehole gas drilling program within PELs 442 and 444, which included the drilling of an additional borehole (AI19) within PEL 444. This modification was approved in November 2011.

AI19 is located within a Sydney Catchment Authority Special Area. Apex Energy NL must reach agreement with SCA on access arrangements prior to conducting any activities. Five of the 15 holes already approved are also within the SCA Special Area.

On 27 June 2011 DTIRIS approved a single coal seam gas exploration drillhole within PEL 454, held by Apex Energy NL and Sydney Basin CBM Pty Ltd. Comments from the NSW Office of Environment and Heritage, NSW Office of Water and the SCA were considered in the DTIRIS assessment process and addressed where relevant in the revised application and approval conditions.

TRADE & INVESTMENT,  
REGIONAL INFRASTRUCTURE & SERVICES  
Resources & Energy

Director General Briefing

INQUIRY INTO COAL SEAM GAS MONDAY 12 DECEMBER 2011  
SUPPLEMENTARY QUESTIONS

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**PURPOSE:**

Response to Supplementary Questions from the Inquiry into Coal Seam Gas on 12 December 2011.

Brief prepared by: Stephen Barry, A/Director Environmental Sustainability Unit.  
Phone: 4931 6601

BOM Member:	Mark Duffy	02 8281 7402
Executive Contact:	Brad Mullard	02 49316404

A/Director Environmental Sustainability

 6/12/12  
Executive Director Mineral and Energy

Deputy Director General Minerals and Energy

Director, Office of the Director General

  
Director General

6/12/12



**TRADE & INVESTMENT,  
REGIONAL INFRASTRUCTURE & SERVICES  
Resources & Energy**

**Director General Briefing**

**INQUIRY INTO COAL SEAM GAS MONDAY 12 DECEMBER 2011  
SUPPLEMENTARY QUESTIONS**

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**PURPOSE:**

Response to Supplementary Questions from the Inquiry into Coal Seam Gas on 12 December 2011.

**BACKGROUND:**

Following the Director General's appearance at the public hearing at Parliament House on Monday, 12 December 2011 for the Inquiry into coal seam gas, 4 supplementary questions have been asked.

**COMMENT:**

The questions are attached. The responses are as follows:

Answer to Question 1

Complaints about coal seam gas companies can be lodged with the Environmental Sustainability Unit of the Division of Resources & Energy:

Phone: (02) 4931 6605  
Email: [coalseamgas@industry.nsw.gov.au](mailto:coalseamgas@industry.nsw.gov.au)  
Post: Environmental Sustainability Unit  
NSW Trade & Investment  
PO Box 344  
Hunter Region Mail Centre  
NSW 2310

Answer to Question 2

NSW has formal links with all Australian jurisdictions through the Coal Seam Gas Steering Group under the Standing Council on Energy & Resources.

The NSW Government also has informal connections with the relevant Queensland Government departments at all levels.

Answer to Question 3

Any coal seam gas activity that is likely to have an unacceptable impact on the environment or water resources will not be approved.

To manage and minimise impacts, petroleum titles contain comprehensive environmental conditions, including requirements to rehabilitate any disturbed land.

The *Petroleum (Onshore) Act 1991* provides that rehabilitation can be undertaken by the Minister (if necessary) at the expense of current or former titleholders.

Titleholders are required to submit security deposits that the Government can use to cover

the cost of rehabilitation if companies fail to do so. These securities are required to cover the full rehabilitation cost of coal seam gas activities.

#### Answer to Question 4

As at 31 December 2011, the NSW Government holds in excess of \$1.32 billion in security bonds for the rehabilitation of exploration and mining titles.

Securities held against current petroleum titles total \$12,771,750 as at 6 February 2012. This amount reflects the limited scale of activity associated with coal seam gas exploration and development in NSW to date.

The securities held against individual petroleum titles are set out in Tab A (Titles Administration System Information Report).

Securities are held until the Government is satisfied that any outstanding rehabilitation liabilities have been fulfilled. In the event that a security is inadequate (or no longer held), the *Petroleum (Onshore) Act 1991* provides that rehabilitation can be undertaken by the Minister at the expense of current or former titleholders.

#### **RECOMMENDATION(S)**

The Director General notes this brief.



**SUPPLEMENTARY QUESTIONS FROM  
THE INQUIRY INTO COAL SEAM GAS  
12 December 2011**

**QUESTIONS**

1. Many Inquiry participants have raised concerns about the behaviour of coal seam gas companies. Who can members of the public complain to about such behaviour, and what is the complaint process?
2. The recently released Senate Committee Report on the 'Impact of mining coal seam gas on the management of the Murray Darling Basin' stated: 'The committee trusts that there is extensive consultation between the Queensland and NSW authorities. NSW has the opportunity to have a comprehensive regulatory framework in place before production commences, drawing on lessons learned [in Queensland] ...'. What formal consultation arrangements are in place with Queensland?
3. Many Inquiry participants are concerned about whether there will be adequate remediation of coal seam gas wells and infrastructure, once a site reaches the end of its productive life. There are particular concerns about the potential for adverse impacts on water resources that may not appear until years or decades later. What requirements are in place to ensure that appropriate remediation takes place?
4. What security deposits are mining companies required to lodge with the State, to provide for future remediation of coal seam gas wells and other infrastructure? What is the monetary range that companies have been required to pay to date as security deposits, for both exploration and production licences? How long are the security deposits kept in trust for both exploration and production licences?



Tab A

CSG Sup. Qs.

Selections:

CURRENT PETROLEUM TITLES at 06-FEB-2012

Sorted By : TITLE CODE (HEADING)

TITLE NUMBER

HOLDER

Report Format : SECURITY

**TAS INFORMATION REPORT  
TITLES SUMMARY - SECURITY**

Title Identifier	Last Security Change	Security Required	Individual Security Held	Joint Security Held
. PETROLEUM ASSESSMENT LEASE				
PAL 2 1991	10-SEP-2009	\$ 232,500	\$ 232,500	\$ 0
1 Record		\$ 232,500	\$ 232,500	\$ 0
. PETROLEUM EXPLORATION LICENCE				
PEL 238 1955	16-SEP-2010	\$ 1,498,000	\$ 1,498,000	\$ 0
PEL 267 1955	28-JAN-2010	\$ 279,500	\$ 279,500	\$ 0
PEL 285 1955	15-OCT-2009	\$ 1,009,000	\$ 1,009,000	\$ 0
PEL 1 1991	16-MAR-2011	\$ 685,000	\$ 685,000	\$ 0
PEL 2 1991	06-MAY-2010	\$ 600,404	\$ 554,750	\$ 0
PEL 4 1991	04-NOV-2008	\$ 85,000	\$ 85,000	\$ 0
PEL 5 1991	28-APR-2005	\$ 106,000	\$ 106,000	\$ 0
PEL 6 1991	13-MAY-2010	\$ 105,000	\$ 105,000	\$ 0
PEL 12 1991	04-DEC-2008	\$ 275,000	\$ 275,000	\$ 0
PEL 13 1991	01-JUL-2010	\$ 50,000	\$ 50,000	\$ 0
PEL 16 1991	01-JUL-2010	\$ 620,000	\$ 620,000	\$ 0
PEL 422 1991	14-JUL-2006	\$ 50,000	\$ 50,000	\$ 0
PEL 424 1991	14-JUL-2006	\$ 50,000	\$ 50,000	\$ 0
PEL 426 1991	01-SEP-2010	\$ 85,000	\$ 85,000	\$ 0
PEL 427 1991	16-SEP-2010	\$ 50,000	\$ 50,000	\$ 0
PEL 428 1991	26-FEB-2009	\$ 45,000	\$ 45,000	\$ 0
PEL 433 1991	19-JAN-2010	\$ 105,000	\$ 105,000	\$ 0
PEL 434 1991	12-JAN-2010	\$ 25,000	\$ 25,000	\$ 0
PEL 437 1991	27-JUN-2006	\$ 45,000	\$ 45,000	\$ 0
PEL 442 1991	- -	\$ 15,000	\$ 15,000	\$ 0
PEL 444 1991	05-DEC-2003	\$ 25,000	\$ 25,000	\$ 0
PEL 445 1991	09-FEB-2010	\$ 245,000	\$ 245,000	\$ 0
PEL 450 1991	04-DEC-2008	\$ 260,000	\$ 260,000	\$ 0
PEL 452 1991	27-MAR-2007	\$ 80,000	\$ 80,000	\$ 0
PEL 454 1991	26-JUL-2011	\$ 25,000	\$ 25,000	\$ 0
PEL 455 1991	- -	\$ 10,000	\$ 10,000	\$ 0
PEL 456 1991	10-DEC-2008	\$ 120,000	\$ 120,000	\$ 0
PEL 457 1991	01-SEP-2010	\$ 25,000	\$ 25,000	\$ 0
PEL 458 1991	01-SEP-2010	\$ 145,000	\$ 145,000	\$ 0
PEL 459 1991	24-SEP-2010	\$ 135,000	\$ 135,000	\$ 0
	21-JAN-2011	25,000	\$ 25,000	\$ 0



**TAS INFORMATION REPORT  
TITLES SUMMARY - SECURITY**

Title Identifier	Last Security Change	Security Required	Individual Security Held	Joint Security Held
PEL 460 1991		\$		
PEL 461 1991	26-FEB-2009	\$ 30,000	\$ 30,000	\$ 0
PEL 462 1991	- -	\$ 10,000	\$ 10,000	\$ 0
PEL 463 1991	08-APR-2010	\$ 20,000	\$ 20,000	\$ 0
PEL 464 1991	09-FEB-2010	\$ 70,000	\$ 70,000	\$ 0
PEL 468 1991	22-JUN-2011	\$ 32,000	\$ 32,000	\$ 0
PEL 469 1991	- -	\$ 10,000	\$ 10,000	\$ 0
PEL 470 1991	- -	\$ 10,000	\$ 10,000	\$ 0
PEL 471 1991	- -	\$ 20,000	\$ 20,000	\$ 0
PEL 472 1991	- -	\$ 20,000	\$ 20,000	\$ 0
PEL 473 1991	- -	\$ 20,000	\$ 20,000	\$ 0
PEL 474 1991	- -	\$ 20,000	\$ 20,000	\$ 0
PEL 475 1991	- -	\$ 20,000	\$ 20,000	\$ 0
PEL 476 1991	- -	\$ 20,000	\$ 20,000	\$ 0
PEL 478 1991	- -	\$ 10,000	\$ 10,000	\$ 0
PEL 479 1991	16-SEP-2010	\$ 25,000	\$ 25,000	\$ 0
46 Records	*	\$ 7,214,904	\$ 7,169,250	\$ 0
.PETROLEUM EXPLORATION PERMIT				
PEP 11 1967	- -	\$ 0	\$ 0	\$ 0
1 Record	*	\$ 0	\$ 0	\$ 0
.PETROLEUM PRODUCTION LEASE				
PPL 1 1991	22-JUN-2011	\$ 5,165,000	\$ 0	\$ 5,165,000
PPL 2 1991	22-JUN-2011	\$ #	\$ 0	\$ #
PPL 4 1991	22-JUN-2011	\$ #	\$ 0	\$ #
PPL 5 1991	22-JUN-2011	\$ #	\$ 0	\$ #
PPL 6 1991	22-JUN-2011	\$ #	\$ 0	\$ #
PPL 3 1991	- - -	\$ 205,000	\$ 205,000	\$ 0
6 Records	*	\$ 5,370,000	\$ 205,000	\$ 5,165,000
54 Records	GRAND TOTAL	\$ 12,817,404	\$ 7,606,750	\$ 5,165,000

Tab A.  
Q.N.



Industry &  
Investment

Contract for Services  
Title

This is an agreement between **Department of Trade and Investment, Regional Infrastructure and Services for and on behalf of the State of New South Wales** (ABN 72 189 919 072) located at 161 Kite Street Orange NSW 2800 ("**T&I NSW**") and the Contractor for the Contractor to provide **Services** in accordance with the following **Details** and **Terms and Schedules** ("**the Agreement**").

Details

<b>Contractor</b>	<p>Name: Campbell Macpherson Pty Ltd  Address: PO Box 245  Waverley NSW 2024  ABN: 55 117 400 138</p> <p>Contact Person: Dr Deborah Campbell  Position: Director and Principal Consultant  Address: PO Box 245  Waverley NSW 2024  Telephone: 0410 426 653  Fax: -  E-mail: deb@campbell-macpherson.com</p>
<b>T&amp;I NSW Contact Person</b>	<p>Contact Person: Jenny Nash  Position: Director Mine Safety Performance  Address: 516 High St,  Maitland, NSW  Telephone: (02) 49 316 622  Fax: (02) 49 316 790  E-mail: jenny.nash@industry.nsw.gov.au</p>
<b>Project</b>	Review of Existing Fraccing Standards and Compilation of Fraccing Standards for NSW,
<b>Commencement Date</b> (refer to "Term" in clause 1.2)	26 September 2011
<b>Expiry Date</b> (refer to "Term" in clause 1.2)	
<b>Services</b>	<ul style="list-style-type: none"> <li>Review existing domestic and international, government and industry fraccing standards: <ul style="list-style-type: none"> <li>Identify relevant standards</li> <li>Review existing standards - to manage health, safety and environmental risks</li> </ul> </li> <li>Identify existing best practice regulatory standards where possible which address risks associated with fraccing CSG wells in the NSW context.</li> <li>Where an appropriate standard does not exist, identify as far as possible the gap.</li> <li>In consultation with the Department, consult with relevant technical and industry experts and stakeholders as agreed.</li> </ul>



	<ul style="list-style-type: none"> <li>• Prepare, as required by the Department, interim briefing papers for the Coal Seam Gas Working Group</li> <li>• Prepare a written report covering the identification and review of relevant standards, and recommended standards.</li> </ul>
Fee(s)	\$1500 per day plus GST + travel cost at actual cost (up to 15 days, and thereafter, as agreed by the Department)
Items to be supplied by T&I NSW (refer to clause 3.1)	Any standards which have to be purchased (eg: relevant API standards)
Special Conditions:	

## Terms of Services

### 1. Definitions and Interpretation

#### 1.1 Interpretation

Unless the context requires otherwise, in this Agreement:

- (a) the terms set out in the left hand column of the Details have the meaning ascribed to them in the right hand column of the Details;
- (b) words in the singular include the plural and vice versa;
- (c) where any time limit pursuant to this Agreement falls on a day which is not a Business Day then the time limit will be deemed to have expired on the next Business Day;
- (d) a reference to a statute, regulation, ordinance or by-law will be deemed to include a reference to all statutes, regulations, ordinances or by-laws amending, consolidating or replacing same from time to time;
- (e) headings are for convenience only and do not affect the interpretation of this Agreement;
- (f) the meaning of general words is not limited by specific examples introduced by "including" or "for example" or similar expressions;
- (g) references to persons include bodies corporate, government agencies and vice versa;
- (h) references to the parties include references to respective directors, officers, employees, agents of the parties;
- (i) nothing in this Agreement is to be interpreted against a party solely on the ground that the party put forward this Agreement or any part of it; and
- (j) where an expression is defined, any other grammatical form of that expression has a corresponding meaning.

#### 1.2 Definitions

**Background IP** means Intellectual Property that is made available by a party for the purpose of this Agreement, whether upon commencement of this Agreement or during the Term, and:

- (a) is in existence prior to the date of this Agreement; or
- (b) is brought into existence independently of this Project.

**Business Day** means any day other than a Saturday, Sunday or public holiday in New South Wales.

**Claim** means any cost, expense, loss, damage, claim, action, proceeding or other liability (whether in contract, tort or otherwise), however arising and includes legal costs on a full indemnity basis.

**Confidential Information** of a party means all trade secrets, financial information and other commercially or scientifically valuable information of whatever description and in whatever form (whether written or oral, visible or invisible) which:

- (a) is by its nature confidential;
- (b) has been designated as confidential by a party;
- (c) is capable of protection at law or equity as confidential information; or
- (d) is derived or produced partly from the Confidential Information.

**Contract Material** means all documents, data and other material first created or brought into existence under this Agreement and includes questionnaires, reports, software, technical information, plans, maps, charts, photographs, drawings, calculations, tables, schedules, electronic or magnetic data.

**Event of Force Majeure** means an event or circumstance which is beyond the control and without the fault or negligence of the party affected and which by the exercise of reasonable diligence the party affected was unable to prevent including war, act of foreign enemies, act of terrorism, earthquake, flood, fire, civil insurrection and strike or industrial dispute.

**Intellectual Property** includes:

- (a) all rights in relation to copyright, inventions, plant varieties, trademarks, designs, patents;
- (b) all other rights resulting from intellectual activity in the industrial, scientific, literary or artistic fields including trade secrets and know-how

but does not include Moral Rights.

**Moral Rights** has the same meaning as in the *Copyright Act 1968 (Cth)*.

**Notice** means any approvals, consents, instructions, orders, directions, statements, requests and certificates, or other communication to be given under this Agreement.

**Personal Information** has the same meaning as in the *Privacy and Personal Information Protection Act 1998 (NSW)*.

**Term** means the period commencing on the Commencement Date and ending on the Expiry Date, unless terminated earlier, or extended, in accordance with this Agreement.

## 2. The Contractor's Obligations

### 2.1 The Contractor must:

- (a) undertake the Services in accordance with this Agreement;
- (b) perform the Services with due professional care and skill;
- (c) comply with all policies, guidelines and reasonable directions provided by T&I NSW to the Contractor; and
- (d) if required by T&I NSW, provide a subcontractor's statement for the purpose of section 175B of the *Workers Compensation Act 1987*, Schedule 2 Part 5 of the *Pay-roll Tax Act 2007* and section 127 of the *Industrial Relations Act 1996*;
- (e) ensure the occupational health and safety of all people (including the Contractor's employees and subcontractors and members of the public) who may be affected by the Contractor's activities under the Agreement in compliance with the Occupational Health & Safety Act 2000 and the Occupational Health and Safety Regulation 2001;
- (f) avoid damage to property and the environment when carrying out the Services, and make good any such damage at the Contractor's expense; and



- (g) prevent nuisance or inconvenience to anyone who may be affected in undertaking the Services.

### 3. **T&I NSW's Obligations**

#### 3.1 T&I NSW will:

- (a) if applicable as set out in the Details, provide the Items to enable the Services to be performed;
- (b) pay the Contractor the Fees for performing the Services within 30 days of receipt by T&I NSW of a valid Tax Invoice (as defined in **clause 5**) subject to certification by T&I NSW as to satisfactory completion of the Services in accordance with this Agreement.

- 3.2 Any payment of Fees by T&I NSW does not constitute an admission on the part of T&I NSW that the Services are in conformity with this Agreement and no payment will be deemed to release the Contractor from its obligations under this Agreement.

### 4. **Reimbursement of Expenses**

- 4.1 If T&I NSW authorises the Contractor to travel, the Contractor will be reimbursed for actual expenses incurred, on provision of receipts for all expenses claimed. Any approved air travel will be reimbursed at the economy rate only.
- 4.2 Any additional costs, expenses, fees or charges ("**Expenses**") incurred by the Contractor will be the sole responsibility of the Contractor unless the Contractor has obtained the prior written consent of T&I NSW to incur such Expenses.
- 4.3 Any reimbursement of Expenses by T&I NSW under this Agreement will be net of input tax credits (if any) to which the Contractor is entitled under the GST law, as defined in **clause 5**.

### 5. **GST**

- 5.1 Unless otherwise defined in this Agreement, words or expressions used in this clause have the same meaning as defined in the *A New Tax System (Goods and Services Tax) Act 1999* ("**GST law**").
- 5.2 Unless otherwise indicated all amounts referred to in this Agreement are exclusive of GST.
- 5.3 If a taxable supply is made to a recipient, the party which makes the taxable supply must provide the recipient with a tax invoice or other document with information required by the GST law to be included in a tax invoice to enable the recipient to claim an input tax credit.
- 5.4 If the party which makes the taxable supply is not registered for GST it must provide the recipient with a statement with the first invoice in accordance with the GST law, or the recipient will withhold a withholding payment.
- 5.5 If any GST is payable by the party which makes the taxable supply under this Agreement, any consideration payable for any such taxable supply will be increased by the amount of GST payable (except to the extent that the consideration is already expressed to be GST inclusive).

### 6. **Intellectual Property**

- 6.1 The Contractor acknowledges and agrees that ownership of, and all Intellectual Property Rights in, any Contract Material will vest on their creation in T&I NSW.
- 6.2 The Contractor must, at its own cost, do all things necessary and execute all documents required to vest legal and beneficial ownership of all Contract Material and Intellectual Property Rights in T&I NSW in accordance with clause 6.1.
- 6.3 The Contractor must promptly deliver all Contract Material to T&I NSW on expiry or termination of this Agreement or on earlier demand by T&I NSW.

- 6.4 T&I NSW reserves the right, at any time, to alter, qualify or reject any statement, design, conclusion, recommendation or other information provided or made by the Contractor in any report or other Contract Material.
- 6.5 The Contractor must ensure the Contract Material is used, copied, supplied or reproduced only for the purposes of this Agreement unless it has obtained the prior written approval of T&I NSW to do otherwise. T&I NSW may withhold the approval or impose any conditions on that approval at its discretion.
- 6.6 Each party retains ownership of any material or Background IP it provides to enable the Services to be carried out.
- 6.7 The Contractor warrants that:
- (a) to its actual knowledge or belief, after actual enquiry, it is the owner of or is otherwise entitled to provide the Background IP that it makes available for the purposes of this Agreement;
  - (b) except to the extent disclosed in this Agreement, or to T&I NSW, when making Background IP available, that Background IP is unencumbered; and
  - (c) it will not enter into any agreement in relation to or otherwise deal with that Background IP in a manner that restricts the exercise of the rights granted to T&I NSW under this Agreement.
- 6.8 The Contractor uses any Background IP provided by T&I NSW at its own risk.
- 6.9 The Contractor must return all material provided to it by T&I NSW on expiry or termination of this Agreement or on earlier demand by T&I NSW. T&I NSW retains ownership of all that material.
- 7. Confidential Information**
- 7.1 Each party as the recipient of Confidential Information ("Recipient") must in relation to the Confidential Information of the other party ("Discloser"):
- (a) keep it confidential;
  - (b) use it only as permitted under this Agreement;
  - (c) not disclose it to any person other than to its employees, subcontractors and agents who have a need to know;
  - (d) before disclosing it any to any of the people described in sub-clause 7.1(c), make sure that those persons are made aware of the confidential nature of the Confidential Information prior to obtaining access and procure an assurance that any such Confidential Information will be kept confidential;
  - (e) not copy it or any part of it that is in material form other than as strictly necessary and must mark any such copy 'Confidential – ([Name of Discloser]);
  - (f) implement security practices against unauthorised copying, use and disclosure (whether that disclosure is oral, in writing or in any other form);
  - (g) immediately notify the Discloser if the Recipient becomes aware of any unauthorised copying, use or disclosure in any form or any disclosure required by law;
  - (h) promptly comply with any request by the Discloser to return or destroy any or all copies of Confidential Information unless required by law to be retained; and
  - (i) upon expiry or termination of this Agreement, return to the Discloser all Confidential Information provided to it by the Discloser.
- 7.2 A Recipient's obligations of confidentiality under this Agreement do not apply to information that (whether before or after this Agreement is executed):

- (a) was acquired from a source other than the Discloser where such source is entitled to disclose it;
- (b) is independently developed or known by the Recipient including because it is in the public domain otherwise than through a breach of this Agreement or other obligation of confidentiality;
- (c) the Recipient can prove by contemporaneous written documentation was already known to it at the time of disclosure (unless such knowledge arose from disclosure of information in breach of an obligation of confidentiality); or
- (d) is required to be disclosed by law.

7.3 The Recipient bears the onus of showing that any of the above exceptions apply.

## **8. Privacy**

8.1 The Contractor will:

- (a) use Personal Information provided by T&I NSW or collected by the Contractor under this Agreement, only for the purposes of performing its obligations under this Agreement;
- (b) not disclose any Personal Information without the written consent of T&I NSW;
- (c) comply with the Information Protection Principles applying to NSW public sector agencies under the *Privacy and Personal Information Protection Act 1998 (NSW)*; and
- (d) include equivalent requirements (including this clause 7.3) in any subcontract entered into for the provision of any of the Services under this Agreement.

## **9. Use of names and publication**

9.1 The parties agree that T&I NSW will take sole responsibility for all media announcements regarding the Services. The Contractor must refer any media enquiries regarding the Services to T&I NSW.

9.2 The Contractor must obtain written consent from T&I NSW before it uses the name T&I NSW or any derivative thereof, or any trademark or logo of T&I NSW.

9.3 The Contractor must not make any media announcements, publish or otherwise disclose the results of the Services or any Contract Material except with the written approval of T&I NSW.

## **10. Term and Termination**

10.1 This Agreement will continue in force for the Term.

10.2 This Agreement will conclude on the earlier of:

- (a) at the conclusion of the Term, completion of the Services to the reasonable satisfaction of T&I NSW and payment of all Fees and expenses payable under this Agreement to the Contractor;
- (b) termination by either party by giving notice to the other party where the other party has breached any material provision of this Agreement and that other party has not rectified the breach within 30 days of receiving notice requiring it to do so;
- (c) termination by T&I NSW at its convenience for any reason, at any time, by notice in writing to the Contractor; or
- (d) termination by T&I NSW by notice to the Contractor if the Contractor becomes insolvent, makes an assignment for the benefit of creditors, is the subject of winding up proceedings whether voluntary or compulsory otherwise than for the purpose of reconstruction and amalgamation or a receiver is appointed to the Contractor by a court.

10.3 On termination of this Agreement:



- (a) T&I NSW must pay the Contractor for work done and any agreed expenses incurred up to the end of the Agreement (after taking into account any payments already made to the Contractor prior to the date of termination), provided that the Contractor will not be entitled to payment or compensation which would together exceed the Fees which would have been payable under this Agreement; and
- (b) all Background IP must be returned to the disclosing party or disposed of as directed by that party.

## **11. Insurance**

11.1 The Contractor must maintain the following insurance policies during the Term of the Agreement:

- (a) public liability insurance, in the amount of not less than \$5 million in respect of each and every occurrence and unlimited in the aggregate for any period of cover;
- (b) professional indemnity policy for an amount of not less than \$1 million in respect of any one claim;
- (c) worker's compensation insurance which covers all employees;
- (d) comprehensive motor vehicle insurance; and
- (e) any insurance which is compulsory under the laws for the time being in force in any jurisdiction where the Contractor conducts the Services.

11.2 The Contractor must not do, permit or suffer any act, matter or thing or omission whereby any of the policies referred to in this clause may be vitiated, rendered void or voidable.

11.3 On request by T&I NSW, the Contractor must provide a copy of valid and current certificates of currency for each or any of the policies described above.

## **12. Indemnities**

12.1 The Contractor must indemnify and keep indemnified T&I NSW from and against any and all Claims incurred by, or made against, T&I NSW arising directly or indirectly from:

- (a) any breach of this Agreement by the Contractor;
- (b) any unlawful or negligent act or omission by the Contractor or its sub-contractors in connection with this Agreement;
- (c) any illness, injury or death of any person caused or contributed to by the Contractor or its sub-contractors in connection with this Agreement;
- (d) any loss or damage to real or personal property of T&I NSW caused or contributed to by the Contractor or its sub-contractors in connection with this Agreement; or
- (e) any act or omission by the Contractor or its sub-contractors in connection with this Agreement that is an infringement of any intellectual property, moral or privacy rights of T&I NSW or any third party.

12.2 The Contractor's liability to indemnify T&I NSW under this clause will be reduced proportionately to the extent that any negligent or unlawful act or omission by T&I NSW contributed to the relevant Claim.

12.3 The Contractor's liability to indemnify T&I NSW under this clause does not exclude or reduce the liability of, or benefit to, a party that may arise by operation of the common law, statute or the other terms of this Agreement.

## **13. Dispute Resolution**

13.1 A party must not start an arbitration or court proceedings (except proceedings seeking interlocutory relief) about a dispute arising out of this Agreement or the Services the subject of this Agreement unless it has complied with this clause.

- 13.2 A party claiming that a dispute has arisen must notify the other party to the dispute giving details of the dispute.
- 13.3 Each party must negotiate in good faith to resolve a dispute and, if necessary to resolve the dispute, involve the Chief Executive Officers or other senior officers of the parties directly in the negotiations.
- 13.4 If the dispute involves technical matters and has not been resolved by negotiations under the previous clause within a reasonable time, the parties will refer the dispute for determination by an independent expert agreed by the parties in the technical field of the dispute.
- 13.5 If the dispute is not resolved under **clause 13.2** or **13.3** within 30 days (or longer period agreed between the parties), the parties must refer the dispute for mediation by the Australian Commercial Dispute Centre Limited ("ACDC") for resolution in accordance with the Mediation Rules of the ACDC.
- 13.6 If the dispute is not resolved under **clause 13.4** within 60 days after referral (or longer period agreed between the parties) either party may initiate proceedings in a court.
- 14. Force majeure**
- 14.1 Neither party is responsible for any failure to perform its obligations under this Agreement if it is prevented or delayed in performing those obligations by an Event of Force Majeure.
- 14.2 Where there is an Event of Force Majeure, the party prevented from or delayed in performing its obligations must immediately notify the other party giving full particulars of the Event of Force Majeure and the reasons for the Event of Force Majeure preventing that party from or delaying that party in performing its obligations, and that party must use its reasonable efforts to mitigate the effect of the Event of Force Majeure.
- 14.3 Upon completion of the Event of Force Majeure the party affected must as soon as reasonably practicable recommence the performance of its obligations under this Agreement.
- 14.4 An Event of Force Majeure does not relieve a party from liability for an obligation which arose before the occurrence of that event, nor does that event affect the obligation to pay money in a timely manner which matured prior to the occurrence of that event.
- 14.5 If an Event of Force Majeure continues for six [6] months, or such other period as agreed between the parties, this Agreement will terminate on the six month anniversary of the first day of the Force Majeure event.
- 15. Notices**
- 15.1 Subject to **clause 15.3**, and unless otherwise stated in this Agreement, all Notices to be given under this Agreement must be in writing, and hand-delivered, posted, faxed or emailed:
- (a) for the Contractor, using the contact details specified in the Details or as otherwise notified in writing; and
  - (b) for T&I NSW, using the contact details for the Contact Person specified in the Details or as otherwise notified in writing.
- 15.2 Any Notice is deemed to be received by the receiving party as follows:
- (a) if hand delivered, on the day on which it is left at the relevant address;
  - (b) if sent by regular post within Australia, four (4) Business Days after the day on which it is posted;
  - (c) if sent by facsimile, on the date and at the time the sender received a delivery confirmation report; and
  - (d) if sent by email, on entering the information system of the recipient party,
- provided that if it is hand-delivered, faxed or emailed after 5.00pm on a Business Day, it will be deemed to be received on the following Business Day.

15.3 Notices given under the following clauses of the Agreement must not be sent by email: **clause 5** (GST – tax invoice), **clause 9.2** (termination) and **clause 13** (dispute resolution).

**16. General**

16.1 **Survival:** The following clauses survive termination or expiration of this Agreement **clause 6** (Intellectual Property), **clause 6.1** (Confidential Information), **clause 7.3** (Privacy), **clause 10.3** (Termination consequences), **clause 12** (Indemnities), this **clause 16.1** and any other clause which by its nature is intended to survive this Agreement.

16.2 **Subcontractors:** The Contractor:

- (a) must not, without the prior written consent of T&I NSW, subcontract the performance of any part of the Services. In giving written approval, T&I NSW may impose such terms and conditions as it thinks fit;
- (b) remains fully responsible for the performance of the Services if it subcontracts the performance of any part of those Services; and
- (c) must engage any subcontractors under written agreement on terms consistent with this Agreement.

16.3 **Keeping of records and rights of access to such records:** The Contractor:

- (a) must keep complete and accurate records and books of account with respect to its performance of the Services (the "Records"), and must retain such Records for a minimum of seven (7) years after expiry or termination of this Agreement;
- (b) authorises T&I NSW and any State or Commonwealth Government department or agency (the "Auditors") that has provided moneys to T&I NSW for the purposes of the Project, to examine and inspect, at reasonable times and on reasonable notice, any Contract Material held by the Contractor and Records, and allow any such Records to be copied; and
- (c) provide all reasonable assistance in order for the Auditors to properly carry out the inspections and audits referred to in this clause.

**16.4 Disclosure of Information**

The Contractor acknowledges that, under the *Government Information (Public Access) Act 2009*, T&I NSW may be required to publicly disclose information about this Agreement at <https://tenders.nsw.gov.au>.

**16.5 Access to Information**

- (a) In order for T&I NSW to comply with its obligations under the *Government Information (Public Access) Act 2009*, if this Agreement involves the provision of any services by the Contractor to the public on behalf of T&I NSW the Contractor must, within seven (7) days of receiving a written request by T&I NSW, provide T&I NSW with immediate access to the following information contained in records held by the Contractor:
  - (i) information that relates directly to the performance of the Services;
  - (ii) information collected by the Contractor from members of the public to whom it provides, or offers to provide, the Services; and
  - (iii) information received by the Contractor from T&I NSW to enable it to provide the Services.
- (b) For the purposes of sub-clause (a), information does not include:
  - (i) information that discloses or would tend to disclose the Contractor's financing arrangements, financial modelling, cost structure or profit margin;



- (ii) information that the Contractor is prohibited from disclosing to T&I NSW by provision made by or under any Act, whether of any State or Territory, or of the Commonwealth; or
    - (iii) information that, if disclosed to T&I NSW, could reasonably be expected to place the Contractor at a substantial commercial disadvantage in relation to T&I NSW, whether at present or in the future.
  - (c) The Contractor will provide copies of any of the information in sub-clause (a), as requested by T&I NSW, at the Contractor's own expense.
  - (d) Any failure by the Contractor to comply with any request pursuant to sub clause (a) or (c) will be considered a breach of an essential term and will allow T&I NSW to terminate this Agreement by providing notice in writing of its intention to do so with the termination to take effect seven (7) days after receipt of the notice. Once the Contractor receives the notice, if it fails to remedy the breach within the seven (7) day period to the satisfaction of T&I NSW, then the termination will take effect seven (7) days after receipt of the notice.
- 16.6 **Conflict of Interest:** The Contractor must not, during the Term of this Agreement:
- (a) act as a Contractor to any person who carries on or is involved in any capacity in an activity of business; or
  - (b) carry on or be involved in any capacity in an activity or business,
- which may conflict with, or adversely affect, the Contractor's ability to carry out its obligations under this Agreement, and the Contractor agrees to immediately notify T&I NSW in writing if a risk of such a conflict arises.
- 16.7 **Entire Agreement:** This Agreement states all the express terms agreed by the parties as to the matters referred to in this Agreement. It supersedes all prior contracts, obligations, representations, conduct and understandings.
- 16.8 **Variation:** This Agreement may only be varied by agreement in writing signed by the parties.
- 16.9 **Inconsistency:** If there is any inconsistency between provisions of this Agreement then the order of precedence will be:
- (a) the **Details**; then
  - (b) the **Special Conditions**, if any; then
  - (c) these **Terms**; then
  - (d) any **Schedules**.
- 16.10 **Negation of employment, partnership or agency**
- (a) This Agreement does not create a relationship of agency, partnership, and/or employment between the parties.
  - (b) The Contractor must not represent itself as being an employee or agent of T&I NSW or as otherwise able to bind or represent T&I NSW.
- 16.11 **Waiver**
- (a) If a party fails to exercise any of its rights under this Agreement, or delays exercising those rights, that failure or delay will not operate as a waiver of those rights or any future rights or in any respect estop a party from relying on the terms of this Agreement to their full force and effect.
  - (b) Any waiver by a party of a breach of this Agreement must be in writing and will not be construed as a waiver of any further breach of the same or any other provision.
- 16.12 **Assignment:** The Contractor must not assign or novate its obligations or interests under this Agreement, without the prior written consent of T&I NSW.

- 16.13 **Counterparts:** This Agreement may be signed in any number of counterparts which taken together will constitute one instrument
- 16.14 **Governing Law:** The laws of New South Wales govern this Agreement and the parties submit to the non-exclusive jurisdiction of the courts in that State.

**Executed as an Agreement (company)**

Signed for and on behalf of Campbell Macpherson Pty Ltd by:

..........

Signature of Director (1)

Deborah Campbell  
Name of Director (1)

.....27 Sept 2011.....  
Date

Signed for and on behalf of the Department of Trade and Investment, Regional Infrastructure and Services  
by its authorised signatory:

.....Jennifer Nash.....  
Name

.....  
Signature

.....Director, Mine Safety Performance.....  
Title

.....  
Date



TAB B  
Q.O.N

CONFIDENTIAL	PROGRAM	HOLE_NAME	ABBREVIATION	PURPOSE	DEVIATED	FRACTURE STIM	FRAC DATE	PROJECT	TITLE TYPE	TITLE NO	OPERATOR	YEAR	DRILL	LA T94	NG94
Yes	Craven	8	CR06	CSM	No	Yes	May-08	Gloucester Project	PEL	285	AGL Energy Ltd	2009	32	132715940	151.944320150
Yes	Kingfisher	E1		PET	No	Yes	Nov-06		PEL	16	Malgasco Ltd	2009	-28	883150050	153.06063250
Yes	Waukivory	3		CSM	No	Yes	May-08	Gloucester Project	PEL	285	AGL Energy Ltd	2009	-32	022316410	151.976467170
No	Faulkland	3		CSM	No	Yes	Dec-08	Gloucester Project	PEL	285	Lucas Energy Pty Ltd	2008	-32	05272220	151.947388880
Yes	Merangie Park	8	MP08	CSM	No	Yes	Apr-08	Camden Gas Project	PEL	AGL	Energy Ltd	2008	-34	084690870	150.760578270
Yes	Stratford	7		CSM	No	Yes	Dec-08	Gloucester Project	PEL	285	AGL Energy Ltd	2008	-32	094951100	151.985288460
No	Stratford	9		CSM	No	Yes	Jun-08	Gloucester Project	PEL	285	Lucas Energy Pty Ltd	2008	-32	087634580	151.982797010
Yes	Stratford	10		CSM	No	Yes	Dec-08	Gloucester Project	PEL	285	AGL Energy Ltd	2008	-32	087577490	151.954516880
No	Weismantel	3		CSM	No	Yes	Jan-08	Gloucester Project	PEL	285	Lucas Energy Pty Ltd	2008	-32	087577490	151.954516880
Yes	Elizabeth Macarthur	23	EM23	CSM	No	Yes		Camden Gas Project	PPL	1	AGL Energy Ltd	2007	-34	138634730	150.706217320
Yes	Elizabeth Macarthur	24	EM24	CSM	Yes	Yes		Camden Gas Project	PPL	1	AGL Energy Ltd	2007	-34	137603270	150.697845410
Yes	Elizabeth Macarthur	25	EM25	CSM	Yes	Yes		Camden Gas Project	PPL	1	AGL Energy Ltd	2007	-34	137603270	150.697845410
Yes	Elizabeth Macarthur	27	EM27	CSM	No	Yes		Camden Gas Project	PPL	1	AGL Energy Ltd	2007	-34	142369990	150.707952980
Yes	Elizabeth Macarthur	28	EM28	CSM	No	Yes		Camden Gas Project	PPL	1	AGL Energy Ltd	2007	-34	142369990	150.707952980
Yes	Elizabeth Macarthur	30	EM30	CSM	No	Yes	Oct-07	Camden Gas Project	PPL	1	AGL Energy Ltd	2007	-34	115489370	150.719793040
Yes	Elizabeth Macarthur	31	EM31	CSM	No	Yes		Camden Gas Project	PPL	1	AGL Energy Ltd	2007	-34	111746520	150.716882450
Yes	Elizabeth Macarthur	32	EM32	CSM	Yes	Yes	Oct-07	Camden Gas Project	PPL	1	AGL Energy Ltd	2007	-34	111901030	150.717162620
Yes	Elizabeth Macarthur	33	EM33	CSM	No	Yes		Camden Gas Project	PPL	1	AGL Energy Ltd	2007	-34	106247080	150.717382420
Yes	Elizabeth Macarthur	37	EM37	CSM	Yes	Yes	Oct-07	Camden Gas Project	PPL	1	AGL Energy Ltd	2007	-34	116295540	150.714898360
Yes	Razor Back	6	RB06	CSM	No	Yes		Camden Gas Project	PPL	5	AGL Energy Ltd	2007	-34	054534580	150.720933370
Yes	Razor Back	7	RB07	CSM	No	Yes		Camden Gas Project	PPL	4	AGL Energy Ltd	2007	-34	127135370	150.694764250
Yes	Razor Back	8	RB08	CSM	Yes	Yes		Camden Gas Project	PPL	4	AGL Energy Ltd	2007	-34	128125780	150.699481890
Yes	Razor Back	9	RB09	CSM	Yes	Yes		Camden Gas Project	PPL	4	AGL Energy Ltd	2007	-34	133539180	150.695902450
Yes	Razor Back	10	RB10	CSM	No	Yes		Camden Gas Project	PPL	4	AGL Energy Ltd	2007	-34	141244900	150.698743320
Yes	Razor Back	11	RB11	CSM	No	Yes		Camden Gas Project	PPL	4	AGL Energy Ltd	2007	-34	134749840	150.709093340
Yes	Razor Back	12	RB12	CSM	No	Yes		Camden Gas Project	PPL	4	AGL Energy Ltd	2007	-34	132425990	150.714186340
No	Stratford	4		CSM	No	Yes	Dec-07	Gloucester Project	PEL	285	Lucas Energy Pty Ltd	2007	-32	087316000	151.967023410
No	Stratford	8		CSM	No	Yes	Nov-07	Gloucester Project	PEL	285	Lucas Energy Pty Ltd	2007	-32	095631450	151.963862360
No	Stratford	5A		CSM	No	Yes	Dec-07	Gloucester Project	PEL	285	Lucas Energy Pty Ltd	2007	-32	089298450	151.973933810
Yes	Stratford	8B		CSM	No	Yes	Dec-07	Gloucester Project	PEL	285	Lucas Energy Pty Ltd	2007	-32	089584620	151.969778190
Yes	Bibblwindi	2		CSM	No	Yes	Sep-06		PEL	238	Eastern Star Gas Ltd	2006	-30	631527770	149.647833330
Yes	Bibblwindi	3		CSM	No	Yes	Sep-06		PEL	238	Eastern Star Gas Ltd	2006	-30	628722220	149.645805550
Yes	Bibblwindi	4		CSM	No	Yes	Sep-06		PEL	238	Eastern Star Gas Ltd	2006	-30	628500000	149.648583330
Yes	Bibblwindi	5		CSM	No	Yes	Sep-06		PEL	238	Eastern Star Gas Ltd	2006	-30	624250000	149.651416860
Yes	Bibblwindi	6		CSM	No	Yes	Sep-06		PEL	238	Eastern Star Gas Ltd	2006	-30	626944440	149.653333330
Yes	Bibblwindi	7		CSM	No	Yes	Sep-06		PEL	238	Eastern Star Gas Ltd	2006	-30	628944440	149.655388880
Yes	Bibblwindi	8		CSM	No	Yes	Sep-06		PEL	238	Eastern Star Gas Ltd	2006	-30	629220310	149.652589960
Yes	Bibblwindi	9		CSM	No	Yes	Sep-06		PEL	238	Eastern Star Gas Ltd	2006	-30	629402000	149.650636210
Yes	Bibblwindi	10		CSM	No	Yes	Sep-06		PEL	238	Eastern Star Gas Ltd	2006	-30	615514760	149.63894120
Yes	Glenlee	12	GL12	CSM	Yes	Yes	Nov-06	Camden Gas Project	PPL	4	AGL Energy Ltd	2006	-34	071484320	150.750379880
Yes	Glenlee	13	GL13	CSM	Yes	Yes	Nov-06	Camden Gas Project	PPL	4	AGL Energy Ltd	2006	-34	071125030	150.755902810
Yes	Glenlee	16	GL16	CSM	Yes	Yes	Nov-06	Camden Gas Project	PPL	4	AGL Energy Ltd	2006	-34	076755520	150.748175540
Yes	Logan Brae	11	LB11	CSM	Yes	Yes	Nov-06	Camden Gas Project	PPL	1	AGL Energy Ltd	2006	-34	112380010	150.702410050
Yes	Elizabeth Macarthur	2	EM02	CSM	No	Yes	Jun-05	Camden Gas Project	PPL	4	Sydney Gas Company NL	2005	-34	081762830	150.739449120
Yes	Elizabeth Macarthur	3	EM03	CSM	No	Yes	Apr-05	Camden Gas Project	PEL	2	Sydney Gas Company NL	2005	-34	082669510	150.731928150
Yes	Elizabeth Macarthur	4	EM04	CSM	No	Yes	Aug-05	Camden Gas Project	PEL	2	Sydney Gas Company NL	2005	-34	086034510	150.736491860
Yes	Elizabeth Macarthur	5	EM05	CSM	No	Yes	May-05	Camden Gas Project	PEL	2	Sydney Gas Company NL	2005	-34	089890160	150.730707180
Yes	Elizabeth Macarthur	6	EM06	CSM	No	Yes	Mar-05	Camden Gas Project	PEL	2	Sydney Gas Company NL	2005	-34	088813090	150.736437430
Yes	Elizabeth Macarthur	7	EM07	CSM	No	Yes	Mar-05	Camden Gas Project	PEL	2	Sydney Gas Company NL	2005	-34	093887530	150.730675740
Yes	Elizabeth Macarthur	8	EM08	CSM	No	Yes	Mar-05	Camden Gas Project	PEL	2	Sydney Gas Company NL	2005	-34	096651130	150.738479680
Yes	Elizabeth Macarthur	9	EM09	CSM	No	Yes	Mar-05	Camden Gas Project	PEL	2	Sydney Gas Company NL	2005	-34	099063990	150.732619550
Yes	Elizabeth Macarthur	11	EM11	CSM	No	Yes	Mar-05	Camden Gas Project	PPL	4	Sydney Gas Company NL	2005	-34	104213370	150.731751390
Yes	Elizabeth Macarthur	12	EM12	CSM	No	Yes	Mar-05	Camden Gas Project	PPL	4	Sydney Gas Company NL	2005	-34	108050260	150.731755700
Yes	Elizabeth Macarthur	16	EM16	CSM	No	Yes	May-05	Camden Gas Project	PPL	4	Sydney Gas Company NL	2005	-34	120991590	150.728589730
Yes	Elizabeth Macarthur	17	EM17	CSM	No	Yes	Apr-05	Camden Gas Project	PPL	4	Sydney Gas Company NL	2005	-34	122455030	150.738606350
Yes	Elizabeth Macarthur	18	EM18	CSM	No	Yes	Mar-05	Camden Gas Project	PPL	4	Sydney Gas Company NL	2005	-34	126555640	150.714743390
Yes	Elizabeth Macarthur	19	EM19	CSM	No	Yes	Mar-05	Camden Gas Project	PPL	4	Sydney Gas Company NL	2005	-34	130335260	150.707507600
Yes	Elizabeth Macarthur	20	EM20	CSM	No	Yes	Feb-05	Camden Gas Project	PPL	4	Sydney Gas Company NL	2005	-34	126399000	150.706450710
Yes	Elizabeth Macarthur	40	EM40	CSM	Yes	Yes	Sep-06	Camden Gas Project	PPL	4	Sydney Gas Company NL	2005	-34	077983080	150.733275270

Yes	Glenlee	11	GL11	CSM	No	Yes	Camden Gas Project	PPL	4AGL Energy Ltd	2005	-34,071159090	150,755827810
Yes	Hunter Bulga	1		CSM	No	Yes	Hunter Gas Project		AGL Energy Ltd	2005		
Yes	Hunter Bulga	2		CSM	No	Yes	Hunter Gas Project		AGL Energy Ltd	2005		
No	Jilliby	9		CSM	No	Yes				2005		
Yes	Mt Taurus	9	MT09	CSM	No	Yes	Aug-05	PPL	5Sydney Gas Ltd	2005	-33,256090120	151,388712400
Yes	Sugarloaf	2	SL02	CSM	No	Yes	Dec-04	PPL	1Sydney Gas Company NL	2005	-34,136114850	150,734498580
Yes	Sugarloaf	3	SL03	CSM	No	Yes	Apr-06	PPL	4Sydney Gas Company NL	2005	-34,097495420	150,768417800
Yes	Bohena	9		CSM	No	Yes	Apr-06	PPL	4Sydney Gas Company NL	2005	-34,098499500	150,773361720
Yes	Bohena South	1		CSM	No	Yes	Sep-04	PPL	238Eastern Star Gas Ltd	2004	-30,548347220	149,607697220
Yes	Elizabeth Macarthur	10	EM10	CSM	No	Yes	Oct-04	PPL	238Eastern Star Gas Ltd	2004	-30,574864400	149,622238500
Yes	Elizabeth Macarthur	13	EM13	CSM	No	Yes	Mar-06	PPL	4Sydney Gas Company NL	2004	-34,103818710	150,736606480
Yes	Elizabeth Macarthur	14	EM14	CSM	No	Yes	Dec-04	PPL	4Sydney Gas Company NL	2004	-34,112092320	150,736056480
Yes	Elizabeth Macarthur	15	EM15	CSM	No	Yes	Mar-05	PPL	4Sydney Gas Company NL	2004	-34,115585450	150,730896240
No	Jilliby	18		CSM	No	Yes	Dec-04	PPL	4Sydney Gas Company NL	2004	-34,116577880	150,739845650
No	Jilliby	2A		CSM	No	Yes	May-04	PPL	5Sydney Gas Ltd	2004	-33,256090120	151,388712400
Yes	Mt Taurus	1	MT01	CSM	No	Yes	May-04	PPL	5Sydney Gas Ltd	2004	-33,236784440	151,372554440
Yes	Mt Taurus	2	MT02	CSM	No	Yes	Oct-04	PPL	1Sydney Gas Company NL	2004	-34,126881990	150,722003150
Yes	Mt Taurus	3	MT03	CSM	No	Yes	Nov-04	PPL	1Sydney Gas Company NL	2004	-34,124896770	150,727105950
Yes	Mt Taurus	4	MT04	CSM	No	Yes	Nov-04	PPL	1Sydney Gas Company NL	2004	-34,126738740	150,734190720
Yes	Mt Taurus	5	MT05	CSM	No	Yes	Oct-04	PPL	1Sydney Gas Company NL	2004	-34,131258320	150,719163750
Yes	Mt Taurus	6	MT06	CSM	No	Yes	Nov-04	PPL	1Sydney Gas Company NL	2004	-34,130343730	150,726601580
Yes	Mt Taurus	7	MT07	CSM	No	Yes	Nov-04	PPL	1Sydney Gas Company NL	2004	-34,134561540	150,722395090
Yes	Mt Taurus	8	MT08	CSM	No	Yes	Oct-04	PPL	1Sydney Gas Company NL	2004	-34,134500400	150,728628680
Yes	Mt Taurus	10	MT10	CSM	No	Yes	Dec-04	PPL	1Sydney Gas Company NL	2004	-34,132756880	150,736388170
No	Stratford (LMG)	1	LMG01	CSM	No	Yes	Nov-04	PPL	1Sydney Gas Company NL	2004	-32,098413050	151,970834440
No	Stratford (LMG)	3	LMG03	CSM	No	Yes	Apr-04	PPL	285Lucas Energy Pty Ltd	2004	-32,102146110	151,972178880
No	Glenlee	9	GL09	CSM	No	Yes	Jun-04	PPL	285Lucas Energy Pty Ltd	2004	-32,098413050	151,970834440
No	Menangle Park	13	MP13	CSM	No	Yes	Jul-03	PPL	2Sydney Gas Company NL	2003	-34,096078310	150,746084380
No	Menangle Park	14	MP14	CSM	No	Yes	Oct-03	PPL	2Sydney Gas Company NL	2003	-34,094452850	150,742774800
No	Menangle Park	15	MP15	CSM	No	Yes	Oct-03	PPL	2Sydney Gas Company NL	2003	-34,094993900	150,746951560
No	Menangle Park	16	MP16	CSM	No	Yes	Oct-03	PPL	2Sydney Gas Company NL	2003	-34,100783280	150,739979360
No	Menangle Park	17	MP17	CSM	No	Yes	Oct-03	PPL	2Sydney Gas Company NL	2003	-34,107044740	150,738223780
No	Rosaling Park	2	RP02	CSM	No	Yes	Oct-03	PPL	2Sydney Gas Company NL	2003	-34,107920960	150,742801260
No	Rosaling Park	3	RP03	CSM	No	Yes	Aug-03	PPL	2Sydney Gas Company NL	2003	-34,112239000	150,769113170
No	Rosaling Park	4	RP04	CSM	No	Yes	Aug-03	PPL	2Sydney Gas Company NL	2003	-34,109833800	150,771543160
No	Rosaling Park	5	RP05	CSM	No	Yes	Aug-03	PPL	2Sydney Gas Company NL	2003	-34,113788910	150,775519030
No	Rosaling Park	6	RP06	CSM	No	Yes	Aug-03	PPL	2Sydney Gas Company NL	2003	-34,110398550	150,779660440
No	Rosaling Park	7	RP07	CSM	No	Yes	Aug-03	PPL	2Sydney Gas Company NL	2003	-34,114551800	150,780526610
No	Rosaling Park	8	RP08	CSM	No	Yes	Aug-03	PPL	2Sydney Gas Company NL	2003	-34,118712470	150,773911720
No	Rosaling Park	9	RP09	CSM	No	Yes	Aug-03	PPL	2Sydney Gas Company NL	2003	-34,115728780	150,769275270
No	Rosaling Park	10	RP10	CSM	No	Yes	Jul-03	PPL	2Sydney Gas Company NL	2003	-34,121902530	150,767444960
No	Rosaling Park	11		CSM	No	Yes	Aug-03	PPL	2Sydney Gas Company NL	2003	-34,121267780	150,759916990
No	Rosaling Park	12	RP12	CSM	No	Yes	Jun-03	PPL	2Sydney Gas Company NL	2003	-34,116820900	150,764580870
No	Wandiong	1	WG01	CSM	No	Yes	Jul-03	PPL	2Sydney Gas Company NL	2003	-34,115974280	150,759941720
No	Wandiong	2	WG02	CSM	No	Yes	Oct-03	PPL	2Sydney Gas Company NL	2003	-34,138026770	150,719450240
No	Wandiong	3	WG03	CSM	No	Yes	Jun-03	PPL	2Sydney Gas Company NL	2003	-34,139768000	150,724517000
No	Wandiong	4	WG04	CSM	No	Yes	Jul-03	PPL	2Sydney Gas Company NL	2003	-34,139225960	150,730361250
No	Wandiong	5	WG05	CSM	No	Yes	Jun-03	PPL	2Sydney Gas Company NL	2003	-34,141534240	150,716911950
No	Glenlee	2	GL02	CSM	No	Yes	Jul-03	PPL	2Sydney Gas Company NL	2003	-34,144180630	150,721339990
No	Glenlee	4	GL04	CSM	No	Yes	Jun-03	PPL	2Sydney Gas Company NL	2002	-34,071464320	150,750377980
No	Glenlee	5	GL05	CSM	No	Yes	Jun-03	PPL	2Sydney Gas Company NL	2002	-34,075231020	150,742122800
No	Glenlee	6	GL06	CSM	No	Yes	Jul-03	PPL	2Sydney Gas Company NL	2002	-34,078572370	150,752586340
No	Glenlee	7	GL07	CSM	No	Yes	May-02	PPL	2Sydney Gas Company NL	2002	-34,075231020	150,742122800
No	Glenlee	8	GL08	CSM	No	Yes	May-03	PPL	2Sydney Gas Company NL	2002	-34,083405510	150,742518220
No	Kay Park	2	KP02	CSM	No	Yes	Nov-02	PPL	2Sydney Gas Company NL	2002	-34,083405510	150,742518220
No	Kay Park	3	KP03	CSM	No	Yes	Oct-02	PPL	2Sydney Gas Company NL	2002	-34,132065250	150,684788280
No	Kay Park	1	KP01	CSM	No	Yes	Oct-02	PPL	2Sydney Gas Company NL	2002	-34,133735240	150,689852830
No	Logan Brae	9	LB09	CSM	No	Yes	Oct-02	PPL	2Sydney Gas Company NL	2001	-34,136025800	150,683422480
No	Bibbawind	1		CSM	No	Yes	Jan-01	PPL	2Sydney Gas Company NL	2001	-34,123074810	150,695973030
No					No	Yes	May-00	PPL	238Forcenenergy Australia Pty Ltd	2000	-30,634413680	149,650016310

No	Logan Brae	5	LB05	C5M	No	Yes	Jan-01	Camden Gas Project	PEL	25Sydney Gas Company NL	2000	-34.1280892560	150.685587910
No	Logan Brae	6	LB06	C5M	No	Yes	Jan-01	Camden Gas Project	PEL	25Sydney Gas Company NL	2000	-34.124151790	150.689387680
No	Logan Brae	7	LB07	C5M	No	Yes	Jan-01	Camden Gas Project	PEL	25Sydney Gas Company NL	2000	-34.120352570	150.687542310
No	Logan Brae	10	LB10	C5M	No	Yes	Jan-01	Camden Gas Project	PEL	25Sydney Gas Company NL	2000	-34.118543700	150.697985800
No	Apap	1	AP01	C5M	No	Yes	Dec-99	Camden Gas Project	PEL	25Sydney Gas Company NL	1999	-34.088445020	150.667384950
No	Joe Stanley	1	JS01	C5M	No	Yes	Mar-00	Camden Gas Project	PEL	25Sydney Gas Company NL	1999	-34.105284750	150.672556100
No	Joe Stanley	2	JS02	C5M	No	Yes	Mar-00	Camden Gas Project	PEL	25Sydney Gas Company NL	1999	-34.107520440	150.664271520
No	Joe Stanley	3	JS03	C5M	No	Yes	Mar-00	Camden Gas Project	PEL	25Sydney Gas Company NL	1999	-34.103473290	150.658116400
No	Joe Stanley	4	JS04	C5M	No	Yes	Apr-99	Camden Gas Project	PEL	25Sydney Gas Company NL	1999	-34.103642040	150.651444990
No	Johnello	1	JD01	C5M	No	Yes	Apr-99	Camden Gas Project	PEL	25Sydney Gas Company NL	1999	-34.115843650	150.666122800
No	Johnello	2	JD02	C5M	No	Yes	May-99	Camden Gas Project	PEL	25Sydney Gas Company NL	1999	-34.115388010	150.661174290
No	Johnello	3	JD03	C5M	No	Yes	Oct-98	Camden Gas Project	PEL	25Sydney Gas Company NL	1999	-34.121107640	150.656297040
No	Johnello	4	JD04	C5M	No	Yes	Apr-99	Camden Gas Project	PEL	25Sydney Gas Company NL	1999	-34.121107640	150.656297040
No	Johnello	5	JD05	C5M	No	Yes	Oct-99	Camden Gas Project	PEL	25Sydney Gas Company NL	1999	-34.121160470	150.644314110
No	Johnello	6	JD06	C5M	No	Yes	Oct-99	Camden Gas Project	PEL	25Sydney Gas Company NL	1999	-34.124090730	150.643741590
No	Johnello	8	JD08	C5M	No	Yes	Apr-99	Camden Gas Project	PEL	25Sydney Gas Company NL	1999	-34.126201980	150.658647970
No	Johnello	10	JD10	C5M	No	Yes	Apr-99	Camden Gas Project	PEL	25Sydney Gas Company NL	1999	-34.125855980	150.663382970
No	Johnello	11	JD11	C5M	No	Yes	Dec-98	Camden Gas Project	PEL	25Sydney Gas Company NL	1999	-34.119643250	150.660986150
No	Johnello	7A	JD07A	C5M	No	Yes	Dec-98	Camden Gas Project	PEL	25Sydney Gas Company NL	1999	-34.123901400	150.651282190
No	Bohena	3		C5M	No	Yes	Nov-98		PEL	238Forcenergy Australia Pty Ltd	1998	-30.545726270	149.610567800
No	Bohena	5		C5M	No	Yes	Dec-98		PEL	238First Sourcingenergy Group, Inc	1998	-30.535858900	149.600169900
No	Bohena	6		C5M	No	Yes	Dec-98		PEL	238Forcenergy Australia Pty Ltd	1998	-30.536844000	149.612727500
No	Bohena	7		C5M	No	Yes	Dec-98		PEL	238Forcenergy Australia Pty Ltd	1998	-30.543010000	149.613927000
No	Wilga Park	3		C5M	No	Yes	Dec-98		PEL	238Forcenergy Australia Pty Ltd	1998	-30.363681000	149.664711000
No	Wilga Park	5		C5M	No	Yes	Dec-98		PEL	238Forcenergy Australia Pty Ltd	1998	-30.367809000	149.656938600
No	Hawkesbury Eveleigh	1		C5M	No	Yes	Oct-94		PEL	5Pacific Power	1995	-33.895890000	151.193696000
No	Hawkesbury Munnarong	3		C5M	No	Yes	Jul-94		PEL	5Pacific Power	1994	-33.235178000	151.495261000
No	Hawkesbury Munnarong	2		C5M	No	Yes	Dec-93		PEL	5Pacific Power	1993	-33.970225000	151.230056000
No	Hawkesbury Munnarong	1		C5M	No	Yes	Jan-93		PEL	5Pacific Power	1993	-33.234166000	151.500170000
No	Hawkesbury Munnarong	1		C5M	No	Yes	Dec-92		PEL	5Pacific Power	1992	-33.232867000	151.499442000
No	Hawkesbury Lissarow	1		C5M	No	Yes	Feb-92		PEL	279Elecom	1991	-33.375732000	151.384628000
No	Hunter Llanillo	1		C5M	No	Yes	Oct-91		PEL	278Elecom	1991	-32.436026000	150.836535000
No	Hunter Randwick Park	1		C5M	No	Yes	Oct-91		PEL	278Elecom	1991	-32.439696000	150.802667000
No	Wilga Park	1		PET	No	Yes	Mar-98		PEL	238Hertogen Energy Ltd	1995	-30.362208000	149.673355900
No	Applin	1		C5M	No	Yes	Mar-81		PEL	237Hematite	1980	-34.189153750	150.754285720
No	Applin	2		C5M	No	Yes	Mar-81		PEL	237Hematite	1980	-34.190539750	150.767393300
No	Applin	3		C5M	No	Yes	Apr-81		PEL	237Hematite	1980	-34.188424470	150.767694110
No	Applin	4		C5M	No	Yes	Feb-81		PEL	237Hematite	1980	-34.189698960	150.764525000
Yes	Jilliby	3		C5M	No	Yes				AGL Energy Ltd			
Yes	Jilliby	4		C5M	No	Yes				AGL Energy Ltd			
Yes	Jilliby	13		C5M	No	Yes				AGL Energy Ltd			



