# INDEX OF DOCUMENTS HELD ON THE PUBLIC REGISTER FOR GEOTHERMAL EXPLORATION LICENCE GEL 271

1.	23 May 2007	Memorandum entering GEL 271 on the public register.
2.	23 May 2007	Geothermal Exploration Licence GEL 271
		Interests: Clean Energy Australasia Pty Ltd 100%
3.	31 May 2007	Gazettal of Grant of GEL 271
4.	4 June 2009	Variation of licence conditions.
5.	4 June 2009	Memorandum entering variation of licence conditions on the public register.
6.	28 May 2010	Suspension of licence for the period from and including 22 May 2010 to 21 May 2011.
		New expiry date of GEL 271 is 22 May 2013.
7.	28 May 2010	Memorandum entering suspension of licence on the public register.
8.	3 June 2010	Gazettal of suspension.
9.	24 November 2010	Variation of licence conditions
10.	24 November 2010	Memorandum entering variation of licence conditions on the public register.
11.	24 February 2011	Variation of licence conditions.
12.	24 February 2011	Memorandum entering variation of licence conditions on the public register.
13.	30 May 2011	Suspension of licence for the period from and including 22 May 2011 to 21 May 2012.
		New expiry date of GEL 271is 23 May 2014.
14.	30 May 2011	Memorandum entering suspension of licence on the public register.
15.	2 June 2011	Gazettal of suspension.
16.	5 July 2011	Consolidation of licence area with GELs 269, 270, 272 and subsequent revocation of licence.
17.	5 July 2011	Memorandum entering the consolidation of licence area and revocation of licence on the public register.

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18. 3 February 2012 Variation of suspension of licence dated 30 May 2011 insofar as the licence is now suspended for the period from and including 3 June 2011 to 2 June 2012.

The expiry date of GEL 271 is now determined to be 23 May 2014.
 19. 3 February 2012 Memorandum entering variation of licence suspension period on the public register.
 20. 9 February 2012 Gazettal of variation of licence suspension period.

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#### PETROLEUM AND GEOTHERMAL ENERGY ACT 2000

Suspension of Geothermal Exploration Licences— GELs 267, 269, 270, 271, 272, 273, 274, 275, 276 and 277

PURSUANT to Section 90 of the Petroleum and Geothermal Energy Act 2000, notice is hereby given that the suspension dated 30 May 2011, in respect of the abovementioned Geothermal Exploration Licences has been varied insofar as the said Geothermal Exploration Licences have now been suspended for the period from and including 3 June 2011 to 2 June 2012, under the provisions of the Petroleum and Geothermal Energy Act 2000, pursuant to delegated powers dated 1 October 2009.

The expiry date of these GELs is determined to be 23 May 2014.

Dated 3 February 2012.

E. ALEXANDER,

Acting Executive Director,
Energy Resources Division
Department for Manufacturing,
Innovation, Trade, Resources and Energy
Delegate of the Minister for Mineral
Resources and Energy

#### **MEMORANDUM**

GEOTHERMAL EXPLORATION LICENCES GELs 267, 269, 270, 271, 272, 273, 274, 275, 276 and 277

Variation of the suspension of licence dated 30 May 2011 is hereby entered on the public register.

**ELINOR ALEXANDER** 

A/Executive Director

**Energy Resources Division** 

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Department for Manufacturing, Innovation, Trade, Resources and Energy Delegate of the Minister for Mineral Resources and Energy

Date: 3 February 2012

### SUSPENSION OF GEOTHERMAL EXPLORATION LICENCES GELs 267, 269, 270, 271, 272, 273, 274, 275, 276 AND 277

I, ELINOR ALEXANDER, Acting Executive Director Energy Resources Division, Department for Manufacturing, Innovation, Trade, Resources and Energy, in the State of South Australia, pursuant to the provisions of the *Petroleum and Geothermal Energy Act 2000* and all other enabling powers, for and on behalf of Tom Koutsantonis, Minister for Mineral Resources and Energy (Minister), pursuant to delegated powers dated 1 October 2009 hereby –

- (a) vary the instrument dated 30 May 2011 insofar as GELs 267, 269, 270, 271, 272, 273, 274, 275, 276 and 277 are now suspended for the period from 3 June 2011 to 2 June 2012 inclusive.
- 1. No regulated activities are permitted to be carried out during the period of suspension.
- 2. The expiry date of these GELs is determined to be 23 May 2014.

Dated: 3 February 2012

**ELINOR ALEXANDER** 

A/Executive Director

**Energy Resources Division** 

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Department for Manufacturing, Innovation, Trade, Resources and Energy

Delegate of the Minister for Mineral Resources and Energy

#### **MEMORANDUM**

# GEOTHERMAL EXPLORATION LICENCES GELs 269, 270, 271 and 272

1. Consolidation of the adjacent licence areas of GELs 269, 270, 271 and 272, whereby the consolidated licence area is now designated as GEL 269 is hereby entered on the public register.

The total area of GEL 269 is now 1,985 square kilometres approximately.

2. Revocation of GELs 270, 271 and 272 is hereby entered on the public register.

BARRY A. GOLDSTEIN

Executive Director Petroleum and Geothermal Minerals and Energy Resources Primary Industries and Resources SA Delegate of the Minister for Mineral Resources

Development

Date: 5 July 2011

Ref: F2011/000286

### Consolidation of licence areas Geothermal Exploration Licences GELs 269, 270, 271 and 272

### Revocation of licences Geothermal Exploration Licences GELs 270, 271 and 272

- I, BARRY ALAN GOLDSTEIN, Executive Director Petroleum and Geothermal, Minerals and Energy Resources, Department of Primary Industries and Resources, in the State of South Australia, pursuant to section 82 of the *Petroleum and Geothermal Energy Act 2000* and all other enabling powers, for and on behalf of Tom Koutsantonis, Minister for Mineral Resources Development (Minister), pursuant to delegated powers dated 1 October 2009, hereby;
- consolidate adjacent areas of Geothermal Exploration Licences GELs 269, 270, 271 and 272 held by –

#### Clean Energy Australasia Pty Ltd ACN 122 645 229

The consolidated licence area shall hereafter be designated as:

### **Geothermal Exploration Licence GEL 269**

#### DESCRIPTION OF CONSOLIDATED AREA

All that part of the State of South Australia, bounded as follows:-

Commencing at a point being the intersection of latitude 27°55'00"S GDA94 and longitude 140°47'00"E GDA94, thence east to longitude 140°50'00"E GDA94, south to latitude 27°56'00"S GDA94, east to longitude 140°58'00"E GDA94, south to latitude 27°57'00"S GDA94, east to the eastern border of the State of South Australia, thence southerly along the border of the said State to latitude 28°26'00"S GDA94, west to longitude 140°57'00"E GDA94, north to latitude 28°25'00"S GDA94, west to longitude 140°56'00"E GDA94, north to latitude 28°20'00"S GDA94, west to longitude 140°51'00"E GDA94, south to latitude 28°30'00"S GDA94, west to longitude 140°45'00"E GDA94, north to latitude 28°19'00"S GDA94, west to longitude 140°30'00"E GDA94, north to latitude 28°08'00"S GDA94, east to longitude 140°32'00"E GDA94, north to latitude 28°07'00"S GDA94, east to longitude 140°35'00"E GDA94, north to latitude 28°05'00"S GDA94, east to longitude 140°39'00"E GDA94, north to latitude 28°03'00"S GDA94, east to longitude 140°42'00"E GDA94, north to latitude 28°01'00"S GDA94, east to longitude 140°45'00"E GDA94, north to latitude 27°57'00"S GDA94, east to longitude 140°47'00"E GDA94, and north to point of commencement.

AREA: 1985 square kilometres approximately.

 consequently revoke Geothermal Exploration Licences GELs 270, 271 and 272 As a consequence of the consolidation, the work program forming 'condition 1' of the consolidated GEL 269 comprises:

Year of Term of Licence	Minimum Work Requirements
One	<ul> <li>Geological and geophysical review.</li> <li>(Year 1 work program to be conducted anywhere within the boundaries of GELs 267–277)</li> </ul>
Two	Geological and geophysical review.  (Year 2 work program to be conducted anywhere within the boundaries of GELs 267–277)
Three	Geological and geophysical review.  (Year 3 work program to be conducted anywhere within the boundaries of GELs 267, 269-277)
Four	<ul> <li>Geological and geophysical and engineering review.</li> <li>(Year 4 work program to be conducted anywhere within the boundaries of GELs 267, 269 and 273)</li> </ul>
Five	<ul> <li>Geological and geophysical and engineering review.</li> <li>Geophysical survey identified as required from ongoing geoscientific and engineering reviews, such as MT, seismic (reprocessing, infill etc.), gravity magnetic.</li> <li>(Year 5 work program to be conducted anywhere within the boundaries of GELs 267, 269 and 273)</li> </ul>

Dated: 5 July 2011

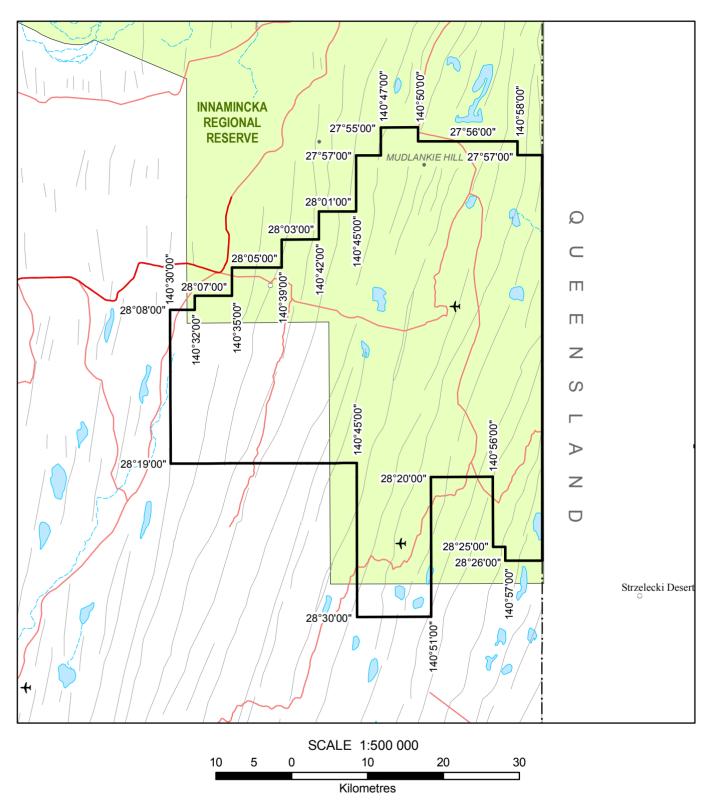
BARRY A. GOLDSTEIN

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Executive Director Petroleum and Geothermal Minerals and Energy Resources Primary Industries and Resources SA Delegate of the Minister for Mineral Resources Development The following signature evidences the consent of the licensee to the consolidation of GELs 269, 270, 271 and 272 as set out in this document and made pursuant to Section 82 of the *Petroleum and Geothermal Energy Act 2000*.

Signed for and on behalf of Clean Energy Australasia Pty Ltd by its authorised representative:

Date
17 ブレルE 20 II Authorised Representative
JOE REICHMAN Name
こ E O Position



Note: There is no warranty that the boundary of this licence is correct in relation to other features of the map. The boundary is to be ascertained by reference to the Geocentric Datum of Australia (GDA94) and the schedule.

#### THE PLAN HEREINBEFORE REFERRED TO

### **GEOTHERMAL EXPLORATION LICENCE NO: 269**



**F2011/000286** AREA: **1985** sq km (approx)

#### PETROLEUM AND GEOTHERMAL ENERGY ACT 2000

Suspension of Geothermal Exploration Licences— GELs 267, 269, 270, 271, 272, 273, 274, 275, 276 and 277

PURSUANT to Section 90 of the Petroleum and Geothermal Energy Act 2000, notice is hereby given that the abovementioned Geothermal Exploration Licences have been suspended for the period from and including 22 May 2011 until 21 May 2012, under the provisions of the Petroleum and Geothermal Energy Act 2000, pursuant to delegated powers dated 1 October 2009.

The expiry date of GELs 267, 269, 270, 271, 272, 273, 274, 275, 276 and 277 is now determined to be 23 May 2014.

Dated 30 May 2011.

#### B. A. GOLDSTEIN,

Executive Director Petroleum and Geothermal Minerals and Energy Resources Primary Industries and Resources SA Delegate of the Minister for Mineral Resources Development

### **MEMORANDUM**

### GEOTHERMAL EXPLORATION LICENCES GELs 267, 269, 270, 271, 272, 273, 274, 275, 276 and 277

- 1. Suspension of licences from and including 22 May 2011 to 21 May 2012 is hereby entered on the public register.
- 2. The expiry date of GELs 267, 269, 270, 271, 272, 273, 274, 275, 276 and 277 is now determined to be 23 May 2014.

BARRY A. GOLDSTEIN

Executive Director Petroleum and Geothermal Minerals and Energy Resources Primary Industries and Resources SA Delegate of the Minister for Mineral Resources Development

Date: 30 May 2011

### SUSPENSION OF GEOTHERMAL EXPLORATION LICENCES GELs 267, 269, 270, 271, 272, 273, 274, 275, 276 and 277

- I, BARRY ALAN GOLDSTEIN, Executive Director Petroleum and Geothermal, Minerals and Energy Resources, Department of Primary Industries and Resources, in the State of South Australia, pursuant to the provisions of the *Petroleum and Geothermal Energy Act 2000* and all other enabling powers, for and on behalf of Tom Koutsantonis, Minister for Mineral Resources Development (Minister), pursuant to delegated powers dated 1 October 2009 hereby -
  - a) suspend geothermal exploration licences GELs 267, 269, 270, 271, 272, 273, 274, 275, 276 and 277 for the period from and including 22 May 2011 to 21 May 2012.
  - 1. No regulated activities are permitted to be carried out during the period of the suspension.
  - 2. The expiry date of GELs 267, 269, 270, 271, 272, 273, 274, 275, 276 and 277 is now determined to be 23 May 2014.

Dated: 30 May 2011

**BARRY A. GOLDSTEIN** 

Executive Director Petroleum and Geothermal
Minerals and Energy Resources
Primary Industries and Resources SA
Delegate of the Minister for Mineral Resources Development

### **MEMORANDUM**

GEOTHERMAL EXPLORATION LICENCES GELs 267, 269, 270, 271, 272, 273, 274, 275, 276 and 277

1. Variation of licence conditions is hereby entered on the public register.

BARRY A. GOLDSTEIN

Director Petroleum and Geothermal Minerals and Energy Resources Primary Industries and Resources SA Delegate of the Minister for Mineral Resources Development

Date: 24 February 2011

### VARIATION OF GEOTHERMAL EXPLORATION LICENCES GELs 267, 269, 270, 271, 272, 273, 274, 275, 276 and 277

I, BARRY ALAN GOLDSTEIN, Director Petroleum and Geothermal, Minerals and Energy Resources, Department of Primary Industries and Resources in the State of South Australia, pursuant to section 25 of the *Petroleum and Geothermal Energy Act 2000* and all other enabling powers, for and on behalf of Tom Koutsantonis, Minister for Mineral Resources Development (Minister), pursuant to delegated powers dated 1 October 2009 vary the conditions of the above-mentioned licences, held by -

#### Clean Energy Australasia Pty Ltd ACN 122 645 229

Condition 1 of the licences is omitted and the following substituted:

"During the term of the licence, the Licensee shall carry out or cause to be carried out, exploratory operations on the area comprised in the licence in accordance with such work programs as are approved by the Minister from time to time. Year one exploratory operations are guaranteed, and any subsequent licence year work program becomes guaranteed upon entry into any such licence year. These exploratory operations shall include but not necessarily be limited to:-

Year of Term of Licence	Minimum Work Requirements		
One	Geological and geophysical review. (To be conducted anywhere within the combined areas of GELs 267-277)		
Two	Geological and geophysical review. (To be conducted anywhere within the combined areas of GELs 267-277)		
Three	<ul> <li>Geological and geophysical review.</li> <li>(To be conducted anywhere within the combined areas of GELs 267, 269, 270, 271, 272, 273, 274, 275, 276 and 277)</li> </ul>		
Four	<ul> <li>Geological, geophysical and engineering review.</li> <li>(To be conducted anywhere within the combined areas of GELs 267, 269, 27 271, 272, 273, 274, 275, 276 and 277)</li> </ul>		
<ul> <li>Geological, geophysical and engineering review;</li> <li>Geophysical survey identified as required from ongoin geoscientific and engineering reviews, such as MT, se (reprocessing, infill etc.), gravity/magnetic.</li> <li>(To be conducted anywhere within the combined areas of GELs 267 271, 272, 273, 274, 275, 276 and 277)</li> </ul>			

Dated: 24 February 2011

BARRY A. GOLDSTEIN

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Director Petroleum and Geothermal Minerals and Energy Resources

Primary Industries and Resources SA
Delegate of the Minister for Mineral Resources Development

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### **MEMORANDUM**

GEOTHERMAL EXPLORATION LICENCES GELs 267, 268, 269, 270, 271, 272, 273, 274, 275, 276 and 277

Variation of licence conditions is hereby entered on the public register.

BARRY A. GOLDSTEIN

Director Petroleum and Geothermal
Minerals and Energy Resources
Primary Industries and Resources SA
Delegate of the Minister for Mineral Resources Development

Date: 24 November 2010

### VARIATION OF GEOTHERMAL EXPLORATION LICENCES GELs 267, 268, 269, 270, 271, 272, 273, 274, 275, 276 and 277

I. BARRY ALAN GOLDSTEIN, Director Petroleum and Geothermal, Minerals and Energy Resources, Department of Primary Industries and Resources in the State of South Australia, pursuant to section 25 of the Petroleum and Geothermal Energy Act 2000 and all other enabling powers, for and on behalf of Paul Holloway, Minister for Mineral Resources Development (Minister), pursuant to delegated powers dated 1 October 2009 vary the conditions of the above-mentioned licences, held by -

#### Clean Energy Australasia Pty Ltd ACN 122 645 229

Condition 1 of the licences is omitted and the following substituted:

During the term of the licence, the Licensee shall carry out or cause to be carried out, exploratory operations on the area comprised in the licence in accordance with such work programs as are approved by the Minister from time to time. Year one exploratory operations are guaranteed, and any subsequent licence year work program becomes guaranteed upon entry into any such licence year. These exploratory operations shall include but not necessarily be limited to:-

Year of Term of Licence	Minimum Work Requirements		
One	Geological and geophysical review.  (To be conducted anywhere within the combined areas of GELs 267 – 277)		
Two	Geological and geophysical review.  (To be conducted anywhere within the combined areas of GELs 267 – 277)		
Three	Geological and geophysical review.  (To be conducted anywhere within the combined areas of GELs 267 – 277)		
Four	Geological, geophysical and engineering review.  (To be conducted anywhere within the combined areas of GELs 267 – 277)		
Five	<ul> <li>Geological, geophysical and engineering review.</li> <li>Geophysical survey identified as required from ongoing geoscientific and engineering reviews, such as MT, seismic (reprocessing, infill, etc), gravity/magnetics.</li> <li>(To be conducted anywhere within the combined areas of GELs 267 – 277)</li> </ul>		

Dated: 24 November 2010

BARRY A. GOLDSTEIN

**Director Petroleum and Geothermal** Minerals and Energy Resources **Primary Industries and Resources SA** 

Delegate of the Minister for Mineral Resources Development

#### PETROLEUM AND GEOTHERMAL ENERGY ACT 2000

Suspension of Geothermal Exploration Licences— GELs 267, 268, 269, 270, 271, 272, 273, 274, 275, 276 and 277

PURSUANT to section 90 of the Petroleum and Geothermal Energy Act 2000, notice is hereby given that the abovementioned Geothermal Exploration Licences have been suspended under the provisions of the Petroleum and Geothermal Energy Act 2000, for the period from and including 22 May 2010 to 21 May 2011, pursuant to delegated powers dated 1 October 2009.

The expiry date of Geothermal Exploration Licences GELs 267, 268, 269, 270, 271, 272, 273, 274, 275, 276 and 277 is now determined to be 22 May 2013.

Dated 28 May 2010.

#### B. A. GOLDSTEIN,

Director Petroleum and Geothermal Minerals and Energy Resources Primary Industries and Resources SA Delegate of the Minister for Mineral Resources Development

#### **MEMORANDUM**

### GEOTHERMAL EXPLORATION LICENCES GELs 267, 268, 269, 270, 271, 272, 273, 274, 275, 276 and 277

- 1. Suspension of licence from and including 22 May 2010 to 21 May 2011 is hereby entered on the public register.
- 2. The expiry date of GELs 267, 268, 269, 270, 271, 272, 273, 274, 275, 276 and 277 is now determined to be 22 May 2013.

BARRY A. GOLDSTEIN

Director Petroleum and Geothermal Minerals and Energy Resources Primary Industries and Resources SA Delegate of the Minister for Mineral Resources Development

Date: 28 May 2010

### SUSPENSION OF GEOTHERMAL EXPLORATION LICENCES GELs 267, 268, 269, 270, 271, 272, 273, 274, 275, 276 and 277

- I, BARRY ALAN GOLDSTEIN, Director Petroleum and Geothermal, Minerals and Energy Resources, Department of Primary Industries and Resources, in the State of South Australia, pursuant to the provisions of the *Petroleum and Geothermal Energy Act 2000* and all other enabling powers, for and on behalf of Paul Holloway, Minister for Mineral Resources Development (Minister), pursuant to delegated powers dated 1 October 2009 hereby -
  - suspend geothermal exploration licences GELs 267, 268, 269, 270, 271, 272, 273, 274, 275, 276 and 277 for the period from and including 22 May 2010 to 21 May 2011.

No regulated activities are permitted to be carried out during the period of the suspension.

The expiry date of GELs 267, 268, 269, 270, 271, 272, 273, 274, 275, 276 and 277 is now determined to be 22 May 2013.

Dated: 28 May 2010

BARRY A. GOLDSTEIN

Director Petroleum and Geothermal Minerals and Energy Resources Primary Industries and Resources SA

Delegate of the Minister for Mineral Resources Development

### Petroleum Act 2000 S.115

### **MEMORANDUM**

### GEOTHERMAL EXPLORATION LICENCES GELs 267, 268, 269, 270, 271, 272, 273, 274, 275, 276 AND 277

1. Variation of licence conditions is hereby entered on the public register.

C. D. COCKSHELL

A/Director Petroleum and Geothermal
Minerals and Energy Resources
Primary Industries and Resources SA
Delegate of the Minister for Mineral Resources Development

Date: 4 June 2009

#### Petroleum Act 2000

### VARIATION OF GEOTHERMAL EXPLORATION LICENCES GELs 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277

I, CYRIL DAVID COCKSHELL, Acting Director Petroleum and Geothermal, Minerals and Energy Resources, Department of Primary Industries and Resources in the State of South Australia, pursuant to section 25 of the *Petroleum Act 2000* and all other enabling powers, for and on behalf of Paul Holloway, Minister for Mineral Resources Development (Minister), pursuant to delegated powers dated 28 March 2002, Gazetted 11 April 2002, page 1573, hereby vary the conditions of the above-mentioned petroleum exploration licence held by -

#### Clean Energy Australasia Pty Ltd ACN 122 645 229

Condition 1 of the licence is omitted and the following substituted:

During the term of the licence, the Licensee shall carry out or cause to be carried out, exploratory operations on the area comprised in the licence in accordance with such work programs as are approved by the Minister from time to time. Years one exploratory operations are guaranteed, and any subsequent licence year work program becomes guaranteed upon entry into any such licence year. These exploratory operations shall include but not necessarily be limited to:-

Year of Term of Licence	Minimum Work Requirements	
One	Geological and geophysical review (To be conducted anywhere in the area covered by GELs 267-277)	
Two	Geological and geophysical review. (To be conducted anywhere in the area covered by GELs 267-277)	
Three	Geological and geophysical review. (To be conducted anywhere in the area covered by GELs 267-277)	
Four	<ul> <li>Well site preparation and site clearances as required; and</li> <li>100km seismic / gravity / magnetic reprocessing</li> <li>(To be conducted anywhere in the area covered by GELs 267-277)</li> </ul>	

<ul> <li>Drill one deep well 3 to 4km and/or re-enter and deepen exist well/s to 3 to 4km;</li> <li>Conduct fracture stimulation as required; and</li> <li>Conduct heat flow testing trial.</li> <li>(To be conducted anywhere in the area covered by GELs 267-277)</li> </ul>	ting
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Dated:

4 June 2009

C.D. COCKSHELL

A/Director Petroleum and Geothermal Minerals and Energy Resources

Primary Industries and Resources SA

Delegate of the Minister for Mineral Resources Development

#### PETROLEUM ACT 2000

#### Grant of Geothermal Exploration Licences

NOTICE is hereby given that the undermentioned Geothermal Exploration Licences have been granted with effect from and including 24 January 2007, under the provisions of the Petroleum Act 2000, pursuant to delegated powers dated 28 March 2002, *Gazetted* 11 April 2002, page 1573.

No. of Licence	Licensee	Locality	Date of Expiry	Reference
GEL 267	Clean Energy Australasia Pty Ltd	Cooper Basin, South Australia	22 May 2012	27/2/441
GEL 268	Clean Energy Australasia Pty Ltd	Cooper Basin, South Australia	22 May 2012	27/2/441
GEL 269	Clean Energy Australasia Pty Ltd	Cooper Basin, South Australia	22 May 2012	27/2/441
GEL 270	Clean Energy Australasia Pty Ltd	Cooper Basin, South Australia	22 May 2012	27/2/441
GEL 271	Clean Energy Australasia Pty Ltd	Cooper Basin, South Australia	22 May 2012	27/2/441
GEL 272	Clean Energy Australasia Pty Ltd	Cooper Basin, South Australia	22 May 2012	27/2/441
GEL 273	Clean Energy Australasia Pty Ltd	Cooper Basin, South Australia	22 May 2012	27/2/441
GEL 274	Clean Energy Australasia Pty Ltd	Cooper Basin, South Australia	22 May 2012	27/2/441
GEL 275	Clean Energy Australasia Pty Ltd	Cooper Basin, South Australia	22 May 2012	27/2/441
GEL 276	Clean Energy Australasia Pty Ltd	Cooper Basin, South Australia	22 May 2012	27/2/441
GEL 277	Clean Energy Australasia Pty Ltd	Cooper Basin, South Australia	22 May 2012	27/2/441

Description of Area—GEL 267

All that part of the State of South Australia, bounded as follows:

Commencing at a point being the intersection of latitude  $27^{\circ}30'00''S$  GDA94 and longitude  $140^{\circ}36'00''E$  GDA94, thence east to longitude  $140^{\circ}49'30''E$  GDA94, south to latitude  $27^{\circ}40'00''S$  GDA94, west to longitude  $140^{\circ}46'00''E$  GDA94, south to latitude  $27^{\circ}41'00''S$  GDA94, west to longitude  $140^{\circ}36'00''E$  GDA94, south to latitude  $27^{\circ}42'00''S$  GDA94, west to longitude  $140^{\circ}35'00''E$  GDA94, north to latitude  $27^{\circ}39'00''S$  GDA94, east to longitude  $140^{\circ}35'00''E$  GDA94, north to latitude  $27^{\circ}37'00''S$  GDA94, east to longitude  $140^{\circ}35'00''E$  GDA94, north to latitude  $27^{\circ}37'00''S$  GDA94, east to longitude  $140^{\circ}36'00''E$  GDA94 and north to the point of commencement.

Area: 498 km<sup>2</sup> approximately.

 $Description\ of\ Area--GEL\ 268$ 

All that part of the State of South Australia, bounded as follows:

Commencing at a point being the intersection of latitude 27°33′00″S GDA94 and longitude 140°49′30″E GDA94, thence east to longitude 140°50′00″E GDA94, south to latitude 27°35′00″S GDA94, east to the eastern border of the State of South Australia, thence southerly along the border of the said State to latitude 27°57′00″S GDA94, west to longitude 140°58′00″E GDA94, north to latitude 27°56′00″S GDA94, west to longitude 140°50′00″E GDA94, north to latitude 27°55′00″S GDA94, west to longitude 140°47′00″E GDA94, north to latitude 27°50′00″S GDA94, east to longitude 140°51′00″E GDA94, north to latitude 27°50′00″S GDA94, east to longitude 140°51′00″E GDA94, north to latitude 27°50′00″S GDA94, east to longitude 140°51′00″E GDA94, north to latitude 27°40′00″S GDA94, east to longitude 140°51′00″E GDA94, north to latitude 27°40′00″S GDA94, west to longitude 140°51′00″E GDA94, north to latitude 27°40′00″S GDA94, west to longitude 140°40′30″E GDA94 and north to the point of commencement.

Area: 497 km<sup>2</sup> approximately.

Description of Area—GEL 269

All that part of the State of South Australia, bounded as follows:

Commencing at a point being the intersection of latitude 27°55′00″S GDA94 and longitude 140°47′00″E GDA94, thence east to longitude 140°50′00″E GDA94, south to latitude 28°16′00″S GDA94, west to longitude 140°48′00″E GDA94, north to latitude 28°10′00″S GDA94, west to longitude 140°30′00″E GDA94, north to latitude 28°08′00″S GDA94, east to longitude 140°32′00″E GDA94, north to latitude 28°07′00″S GDA94, east to longitude 140°35′00″E GDA94, north to latitude 28°05′00″S GDA94, east to longitude 140°39′00″E GDA94, north to latitude 28°05′00″S GDA94, north to latitude 28°01′00″S GDA94, east to longitude 140°45′00″E GDA94, north to latitude 28°01′00″S GDA94, east to longitude 140°45′00″E GDA94, north to latitude 28°01′00″S GDA94, east to longitude 140°45′00″E GDA94 and north to the point of commencement.

Area: 496 km<sup>2</sup> approximately.

Description of Area—GEL 270

All that part of the State of South Australia, bounded as follows:

Commencing at a point being the intersection of latitude 28°12′00″S GDA94 and longitude 140°50′00″E GDA94, thence east to longitude 140°54′00″E GDA94, south to latitude 28°13′00″S GDA94, east to the eastern border of the State of South Australia, thence southerly along the border of the said State to latitude 28°26′00″S GDA94, west to longitude 140°57′00″E GDA94, north to latitude 28°25′00″S GDA94, west to longitude 140°56′00″E GDA94, north to latitude 28°20′00″S GDA94, south to latitude 28°30′00″S GDA94, west to longitude 140°45′00″E GDA94, north to latitude 28°20′00″S GDA94, east to longitude 140°48′00″E GDA94, north to latitude 28°16′00″S GDA94, east to longitude 140°50′00″E GDA94 and north to the point of commencement.

Area: 496 km<sup>2</sup> approximately.

Description of Area—GEL 271

All that part of the State of South Australia, bounded as follows:

Commencing at a point being the intersection of latitude  $27^{\circ}56'00''S$  GDA94 and longitude  $140^{\circ}50'00''E$  GDA94, thence east to longitude  $140^{\circ}58'00''E$  GDA94, south to latitude  $27^{\circ}57'00''S$  GDA94, east to the eastern border of the State of South Australia, thence southerly along the border of the said State to latitude  $28^{\circ}13'00''S$  GDA94, west to longitude  $140^{\circ}54'00''E$  GDA94, north to latitude  $28^{\circ}12''00''S$  GDA94, west to longitude  $140^{\circ}50''00''E$  GDA94, and north to the point of commencement.

Area: 494 km<sup>2</sup> approximately.

Description of Area—GEL 272

All that part of the State of South Australia, bounded as follows:

Commencing at a point being the intersection of latitude 28°10′00″S GDA94 and longitude 140°30′00″E GDA94, thence east to longitude 140°48′00″E GDA94, south to latitude 28°20′00″S GDA94, west to longitude 140°45′00″E GDA94, north to latitude 28°19′00″S GDA94, west to longitude 140°30′00″E GDA94 and north to the point of commencement.

Area: 498 km<sup>2</sup> approximately.

Description of Area—GEL 273

All that part of the State of South Australia, bounded as follows:

Commencing at a point being the intersection of latitude 28°01′00″S GDA94 and longitude 140°03′00″E GDA94, thence east to longitude 140°11′00″E GDA94, south to latitude 28°02′00″S GDA94, west to longitude 140°09′00″E GDA94, south to latitude 28°03′00″S GDA94, west to longitude 140°09′00″E GDA94, south to latitude 28°10′00″S GDA94, east to longitude 140°09′00″E GDA94, south to latitude 28°11′00″S GDA94, east to longitude 140°10′00″E GDA94, south to latitude 28°12′00″S GDA94, west to longitude 140°07′00″E GDA94, south to latitude 28°16′00″S GDA94, east to longitude 140°09′00″E GDA94, south to latitude 28°16′00″S GDA94, east to longitude 140°09′00″E GDA94, west to longitude 140°02′00″E GDA94, west to longitude 140°02′00″E GDA94, north to latitude 28°18′00″S GDA94, east to longitude 140°02′00″E GDA94, north to latitude 28°04′00″S GDA94, east to longitude 140°03′00″E GDA94 and north to the point of commencement.

Area: 498 km<sup>2</sup> approximately.

Description of Area—GEL 274

All that part of the State of South Australia, bounded as follows:

Commencing at a point being the intersection of latitude 28°19′00″S GDA94 and longitude 140°27′00″E GDA94, thence east to longitude 140°33′00″E GDA94, south to latitude 28°34′00″S GDA94, west to longitude 140°16′00″E GDA94, north to latitude 28°33′00″S GDA94, west to longitude 140°15′00″E GDA94, north to latitude 28°32′00″S GDA94, west to longitude 140°14′00″E GDA94, north to latitude 28°28′00″S GDA94, east to longitude 140°27′00″E GDA94 and north to the point of commencement.

Area: 497 km<sup>2</sup> approximately.

Description of Area—GEL 275

All that part of the State of South Australia, bounded as follows:

Commencing at a point being the intersection of latitude 28°19′00″S GDA94 and longitude 140°09′00″E GDA94, thence east to longitude 140°27′00″E GDA94, south to latitude 28°24′30″S GDA94, west to longitude 140°02′00″E GDA94, south to latitude 28°28′00″S GDA94, west to longitude 139°57′30″E GDA94, north to latitude 28°24′30″S GDA94, west to longitude 139°52′00″E GDA94, north to latitude 28°21′00″S GDA94, east to longitude 140°02′00″E GDA94, north to latitude 28°21′00″S GDA94, east to longitude 140°09′00″E GDA94, and north to the point of commencement.

Area: 495 km<sup>2</sup> approximately.

Description of Area—GEL 276

All that part of the State of South Australia, bounded as follows:

Commencing at a point being the intersection of latitude 27°45′00″S GDA94 and longitude 140°01′00″E GDA94, thence east to longitude 140°09′00″E GDA94, south to latitude 28°01′00″S GDA94, west to longitude 140°03′00″E GDA94, south to latitude 28°04′00″S GDA94, west to longitude 139°56′00″E GDA94, north to latitude 28°00′00″S GDA94, east to longitude 139°59′00″E GDA94, north to latitude 27°55′00″S GDA94, east to longitude 140°01′00″E GDA94 and north to the point of commencement.

Area: 497 km<sup>2</sup> approximately.

Description of Area—GEL 277

All that part of the State of South Australia, bounded as follows:

Commencing at a point being the intersection of latitude 27°37′00″S GDA94 and longitude 140°33′00″E GDA94, thence east to longitude 140°34′00″E GDA94, south to latitude 27°39′00″S GDA94, west to longitude 140°32′00″E GDA94, south to latitude 27°42′00″S GDA94, west to longitude 140°32′00″E GDA94, south to latitude 27°45′00″S GDA94, west to longitude 140°23′00″E GDA94, south to latitude 27°45′00″S GDA94, west to longitude 140°21′00″E GDA94, south to latitude 27°45′00″S GDA94, west to longitude 140°21′00″E GDA94, south to latitude 27°45′00″S GDA94, west to longitude 140°10″E GDA94, south to latitude 27°45′00″S GDA94, west to longitude 140°10″E GDA94, south to latitude 27°45′00″S GDA94, west to longitude 140°15′00″E GDA94, south to latitude 27°50′00″S GDA94, west to longitude 140°15′00″E GDA94, south to latitude 27°50′00″S GDA94, west to longitude 140°15′00″E GDA94, south to latitude 27°50′00″S GDA94, west to longitude 140°15′00″E GDA94, south to latitude 27°52′00″S GDA94, west to longitude 140°15′00″E GDA94, south to latitude 27°52′00″S GDA94, west to longitude 140°11′00″E GDA94, south to latitude 27°58′00″S GDA94, west to longitude 140°11′00″E GDA94, south to latitude 27°58′00″S GDA94, west to longitude 140°11′00″E GDA94, south to latitude 27°58′00″S GDA94, west to longitude 140°11′00″E GDA94, south to latitude 27°58′00″S GDA94, west to longitude 140°11′00″E GDA94, south to latitude 27°58′00″S GDA94, west to longitude 140°11′00″E GDA94, south to latitude 27°48′00″S GDA94, east to longitude 140°11′00″E GDA94, north to latitude 27°45′00″S GDA94, east to longitude 140°11′00″E GDA94, north to latitude 27°45′00″S GDA94, east to longitude 140°11′00″E GDA94, north to latitude 27°40′00″S GDA94, east to longitude 140°21′00″E GDA94, north to latitude 27°40′00″S GDA94, east to longitude 140°21′00″E GDA94, north to latitude 27°40′00″S GDA94, east to longitude 140°21′00″E GDA94, north to latitude 27°40′00″S GDA94, east to longitude 140°21′00″E GDA94, north to latitude 27°40′00″S GDA94, east to longitude 140°21′00″E GDA94, nor

Area: 491 km<sup>2</sup> approximately.

Dated 23 May 2007.

B. A. GOLDSTEIN, Director Petroleum and Geothermal Minerals and Energy Resources Primary Industries and Resources SA Delegate of the Minister for Mineral Resources Development

## Petroleum Act 2000 S.115

### **MEMORANDUM**

### GEOTHERMAL EXPLORATION LICENCES GELs 267, 268, 269, 270, 271, 272, 273, 274, 275, 276 and 277

- 1. These licences granted on 23 May 2007 are hereby entered on the public register.
- 2 Interests in the licences are:-

Clean Energy Australasia Pty Ltd

100%

BARRY A. GOLDSTEIN

Director Petroleum and Geothermal Minerals and Energy Resources Primary Industries and Resources SA Delegate of the Minister for Mineral Resources Development

Date: 23 May 2007

#### PETROLEUM ACT 2000

#### GEOTHERMAL EXPLORATION LICENCE

#### **GEL 271**

I, BARRY ALAN GOLDSTEIN, Director Petroleum and Geothermal, Minerals and Energy Resources, Primary Industries and Resources, in the State of South Australia pursuant to the provisions of the *Petroleum Act 2000* and all other enabling powers, for and on behalf of Paul Holloway, Minister for Mineral Resources Development (Minister), pursuant to delegation dated 28 March 2002, (refer Government Gazette dated 11 April 2002 page 1573), HEREBY GRANT to:

#### Clean Energy Australasia Pty Ltd ACN 122 645 229

(hereinafter referred to as the Licensee) an Exploration Licence in relation to a source of geothermal energy in respect of the area set out below, to have effect for a period of five years and to expire on 22 May 2012 but carrying the right of renewal under the Petroleum Act 2000.

#### **DESCRIPTION OF AREA**

The land comprised in this licence is that part of the State of South Australia described in the Schedule hereto:

#### CONDITIONS

During the term of the licence, the Licensee shall carry out or cause to be carried out, exploratory operations on the area comprised in the licence in accordance with such work programs as are approved by the Minister from time to time. Year one exploratory operations are guaranteed, and any subsequent licence year work program becomes guaranteed upon entry into any such licence year. These exploratory operations shall include but not necessarily be limited to:-

Year of Term of Licence	Minimum Work Requirements	
One	Geological and geophysical review.  (to be conducted anywhere in the area covered by GELs 267 to 277)	
Two	Geological and geophysical review. (to be conducted anywhere in the area covered by GELs 267 to 277)	
Three	Measurement of detailed geothermal gradients in accessible well(s).     Design and plan a demonstration heat exchange plant. (to be conducted anywhere in the area covered by GELs 267 to 277)	
Four	<ul> <li>Conduct shallow pilot drilling and measure detailed geothermal gradients; and/or re-enter and deepen existing well(s) and measure detailed geothermal gradients.</li> <li>100 line kilometres of seismic reprocessing</li> <li>Conduct heat exchange trial.</li> <li>(to be conducted anywhere in the area covered by GELs 267 to 277)</li> </ul>	

Drill 1 deep well and/or deepen existing wells (3,000-4,000m)
Conduct heat exchange and power generation trial (to be conducted anywhere in the area covered by GELs 267 to 277)

- 2. The Licensee must take all reasonable precautions to minimise the risks of its activities resulting in a significant loss of petroleum reserves or a significant reduction in the recovery of petroleum reserves.
- 3. The Licensee must:
  - (a) upon commencement of regulated activities under this licence, maintain in force during the term of this licence public liability insurance to cover regulated activities under this licence (including sudden and accidental pollution) in the name of the Licensee for a sum not less than twenty million dollars (\$20,000,000.00) or such greater sum as specified by the Minister and make such amendments to the terms and conditions of the insurance as the Minister may from time to time require;
  - (b) maintain in force during the drilling of any well or operation in any well, control of well insurance in the name of the Licensee for a sum not less than ten million dollars (\$10,000,000.00) or such greater sum as specified by the Minister and make such amendments to the terms and conditions of the insurance as the Minister may from time to time require;
  - (c) upon request by the Minister, provide the Minister with a cover note or certificate of currency of each insurance policy referred to in paragraphs (a) and (b)
- 4. The Minister in specifying the levels of insurance accepts no liability for the completeness of their listing, the adequacy of the sum insured, the limit of liability, the scoped coverage, the conditions or exclusions of these insurances in respect to how they may or may not respond to any loss, damage or liability.
- The Licensee will ensure, when preparing an Environmental Impact Report under Part 12 of the Petroleum Act 2000, that the report also includes an assessment of the potential economic consequences for other licensees under the Petroleum Act 2000 or Mining Act 1971 and owners of land, arising out of proposed regulated activities to be carried out in the licence area
- The Licensee must keep confidential any measurements made in a well which would enable the estimation of petroleum reserves ("Confidential Information") and must not disclose the Confidential Information without first obtaining the written consent of the licensee of the overlapping compatible licence, unless:
  - (a) it is a disclosure required under the Act, this licence or any other law;
  - (b) it is a disclosure which is for the purposes of prosecuting or defending any legal proceedings; or
  - (c) it is information which is or becomes public knowledge other than by breach of this licence condition.
- A contract or agreement entered into by the licensee to transfer or accept liability for any well or facility constructed for the purpose of undertaking a regulated activity under the Petroleum Act 1940 or 2000 cannot transfer, limit or exclude liability under the Petroleum Act 2000 unless written consent of the Minister is obtained.
- In the event that the Licensee during any year of the term of this licence (a year being the period of twelve calendar months ending on the anniversary of the date upon which

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the licence comes into force) fails to comply with the work program requirements of this licence, it is an express term of this licence that the Minister then may use discretion to either cancel this licence or authorise such variation to these requirements as the Minister thinks fit.

The Licensee shall during periods determined by the Minister, lodge and maintain with the Minister, for the satisfaction of obligations arising under the Act or this licence, a security of \$50,000 (fifty thousand dollars) or such greater sum as specified by the Minister from time to time.

("the Security")

- 9.1 The Security shall be lodged in the form of either;
  - (a) cash; or
  - (b) an unconditional, irrevocable bank guarantee or letter of credit in a form, and from a financial institution, approved by the Minister,
- 9.2 Interest will not be payable by the Minister to the Licensee on any cash Security.
- 9.3 All charges incurred by the Licensee in obtaining and maintaining the Security, shall be met by the Licensee.
- 9 4 If upon expiry, this Licence is not renewed and the Minister is satisfied that there are no further obligations under this Licence or the Act, the Minister will return the Security to the Licensee.

Date: 23 M S 20

BARRY A. GOLDSTEIN

Director Petroleum and Geothermal

Minerals and Energy Resources

**Primary Industries and Resources SA** 

**Delegate of the Minister for Mineral Resources Development** 

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# Signed by the said LICENSEE

Witness
Name
PIROL TON
CLUAN CHERCY AUGRALAIN

#### **GEOTHERMAL EXPLORATION LICENCE**

#### **GEL 271**

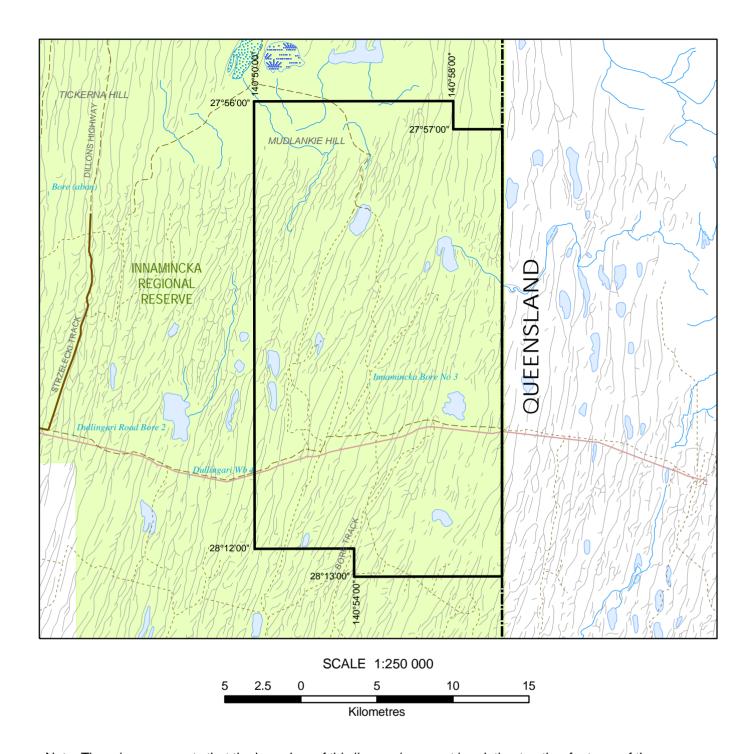
#### THE SCHEDULE

### **DESCRIPTION OF AREA**

All that part of the State of South Australia, bounded as follows:-

Commencing at a point being the intersection of latitude 27°56'00"S GDA94 and longitude 140°50'00"E GDA94, thence east to longitude 140°58'00"E GDA94, south to latitude 27°57'00"S GDA94, east to the eastern border of the State of South Australia, thence southerly along the border of the said State to latitude 28°13'00"S GDA94, west to longitude 140°54'00"E GDA94, north to latitude 28°12'00"S GDA94, west to longitude 140°50'00"E GDA94, and north to the point of commencement.

AREA: 494 square kilometres approximately



Note: There is no warranty that the boundary of this licence is correct in relation to other features of the map. The boundary is to be ascertained by reference to the Geocentric Datum of Australia (GDA94) and the schedule.

#### THE PLAN HEREINBEFORE REFERRED TO

# **GEOTHERMAL EXPLORATION LICENCE NO: 271**



**SR 27/2/441e** AREA: **494** sq km (approx)