



PETRATHERM LIMITED
ABN 17 106 806 884

Paralana Resource Statement

Following deep drilling, fracture stimulation and flow test operations at the Paralana Geothermal Project the Paralana Joint Venture Partners are pleased to provide an updated Independent Resource Statement by Hot Dry Rocks Proprietary Limited.

Paralana Geothermal Resources (Estimated Recoverable Thermal Energy expressed in Petajoules (PJ_{th}))

Depth Interval (metres)	Inferred (PJ _{th})	Indicated (PJ _{th})	Measured (PJ _{th})	Total (PJ _{th})
<3,500	2,400	1,100		3,500
3,500 - 4,000	4,900	4,400	41	9,300
4,000 - 4,500	5,900	5,700		12,000
4,500 - 5,000	6,900	6,700		14,000
Total (PJ_{th})	20,000	18,000	41	38,000

**Paralana Joint Venture: Petratherm 79%, Beach Energy 21%. If remaining staged equity investments are met, Beach Energy may earn up to 36% interest and TRUenergy a 30% interest, leaving Petratherm with 34% interest.*

Key Points:

- Increased resource confidence with close to half of the initial Inferred Resource improving to “Indicated” and a smaller portion to “Measured” status.
- The initial stimulated volume of rock at the Paralana 2 well site provides a Measured Resource estimate of 41 PJ_{th}, which has the potential to sustain 5.4 MWe of power production for 30 years.
- At the 3,500 to 4,000 metres depth interval, which is the target zone for initial development, total estimated Resources are 9,300 PJ_{th}. This easily provides the energy potential for Petratherm’s long term ambition of generating 520 MWe into the national electricity market.
- The total estimated recoverable Resource is 38,000 PJ_{th}. To put this into context this:
 - Based on the estimated 9300 PJ_{th} that could be recovered from the 3500m - 4000m depth interval is sufficient to generate **1300 MW of power generation for 30 years.**
 - This is equivalent to Coal fired power generators burning approximately **650 million tonnes** of black coal which will emit approximately **1.9 billion tonnes of CO₂** into the atmosphere to generate the same amount of electricity.

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The Geothermal Resource Statement was undertaken by independent geothermal consulting experts Hot Dry Rocks Proprietary Limited (HDR). The full Statement of Geothermal Resources, which defines the workings on how the calculations are derived, will be posted on the Petratherm web site shortly.

The Resource Statement conforms with the current (second) edition of The Geothermal Reporting Code where a Geothermal Resource is newly defined as that portion of the stored heat which can be recovered to surface rather than stored heat in place. The Geothermal Reporting Code recognises three levels of Geothermal Resource (Inferred, Indicated and Measured) based upon increasing levels of geological knowledge and confidence which directly affect the assessment of the probability of occurrence. The original Paralana Resource Statement made in December 2008 estimated $230,000 \pm 40,000 \text{ PJ}_{\text{th}}$ of stored heat in place. The new revised statement estimates total stored heat of $272,000 \text{ PJ}_{\text{th}}$.

In addition to the amount of energy available the vertical extent of an Engineered Geothermal Systems (EGS) reservoir is limited to the thickness of rock that can be stimulated. HDR considers 500m to be an appropriate aspirational target, and hence the Geothermal Resource Estimate is broken down into depth slices representing separate EGS reservoir targets.

The highest resource category demonstrating a very high level of confidence is that of a Measured Geothermal Resource. The drilling of Paralana 2 into the reservoir, subsequent fracture stimulation which created a stimulated volume of 1.17 km^3 and flow testing has allowed an estimated Measured Geothermal Resource of $41 \text{ PJ}_{\text{th}}$ to be calculated. This is sufficient to sustain 5.4 MWe of power production for 30 years.


With the direct measurements of the geothermal reservoir at depth and there being a high level of confidence of the temperature prediction within a 10km radius of Paralana 2 much of the original inferred resource has been improved to Indicated Resource Status. The Indicated resource at the planned initial development depth of 3,500 to 4,000 metres is $4,400 \text{ PJ}_{\text{th}}$. To put this into context, this is enough to support the 590 MWe of electrical power generation over a 30 year period, which exceeds Petratherm's current long term power development plan.

In Summary, the updated Independent Resource Statement has determined that a significant Geothermal Resource exists at Paralana. The next critical phase of work, the completion of fluid circulation system by drilling Paralana 3 during the 2012 calendar period will aim to begin to unlock the commercial potential of these vast Resources.

Competent Persons Statement

The information in the report to which this statement refers that relates to Exploration Results, Geothermal Resources or Geothermal Reserves is based on information compiled by Dr Graeme Beardsmore, who appears on the Register of Practising Geothermal Professionals maintained by the Australian Geothermal Energy Group Incorporated at the time of the publication of this statement. Dr Beardsmore is employed by Hot Dry Rocks Pty Ltd, an independent consulting group that provides services to Petratherm. Dr Beardsmore has sufficient experience which is relevant to the style and type of geothermal play under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the Second Edition (2010) of the 'Australian Code for Reporting Exploration Results, Geothermal Resources and Geothermal Reserves'. Dr Beardsmore has consented in writing to the inclusion in this statement of the matters based on his information in the form and context in which they appear.

Yours faithfully



Terry Kallis
Managing Director

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