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Monday, 4 June 2007

ASX Announcement

## **SOUTH AUSTRALIA'S PARALANA PROJECT MOVES TO** **KEY HEAT EXCHANGER WELL DESIGN & RIG SELECTION**

Petratherm Limited, on behalf of the Paralana Energy Joint Venture (PEJV), is pleased to announce two further milestones in the development of one of Australia's most advanced geothermal projects - the Paralana hot rock project in South Australia's northern Flinders Ranges, just 11 kilometres from the Beverley uranium mine and 130 kilometres east of Leigh Creek. The PEJV consists of Petratherm with Beach Petroleum Ltd earning up to 36%.

**Today the PEJV approved the commencement of the**

- Deep Well Design, and**
- Rig Selection Process**

**for two production wells which will form the basis of a circulating water system to tap the underground heat source at a depth of 3.5 to 4.0 kilometres at the Paralana project site.** Circulating water will extract heat from hot rock strata in the subsurface (the subsurface heat exchanger) to provide a source of energy for use in turbines for power generation, with targeted initial electricity output of 7.5MW.

Earlier drilling at Paralana established sufficiently high temperature gradients to warrant deeper drilling. It remains to confirm the temperature at depths of 3.5 to 4.0 kilometres to trigger full scale development. This is a key objective of the first well which will be completed as a large diameter producing well, to be followed by an injection well with specific location and configuration dependent on the geological data obtained in the first well.

Well design and rig selection are expected to be completed within two months. This will enable a project works timetable to be prepared. The timetable being critically dependent on the availability of suitable drilling rigs, which are in tight supply due to record levels of oil and gas exploration.

Based on current assessments of rig availability, Petratherm remains on track to commence the two well heat exchanger drilling program in early 2008, leading to commercial geothermal electricity production to supply the Beverly mine from the end of 2009.

## **Australian Drilling Associates Pty Ltd appointed to well design and rig selection**

The PEJV has engaged Australian Drilling Associates Pty Ltd (ADA) to undertake the immediate planning and design of the two Paralana heat exchanger deep wells.

ADA is an Australian oil and gas project manager with experience in deep well design and drilling.

ADA's project management, well design, and drilling techniques, which have achieved major reductions in time, cost and risk with its projects in the Bass Strait, will be important for the Paralana project.

Concurrently, an assessment of rig requirement, availability and costing will be completed and a clear program of drilling and associated works finalised.

The ADA work is planned to be completed by late July and will be followed by the acquisition of long lead time items for the historic two well schedule.

## **Global Power Solutions appointed as geothermal advisors**

The US-based Global Power Solutions (GPS) - a world leading geothermal energy consultancy – has been appointed to advise on the Paralana Project and on Petratherm's other projects in Australia and Spain.

GPS is experienced, having involvement in more than half of the world's installed geothermal plants (over 5000 MW), the majority in the US.

GPS will provide technical oversight to the Paralana well design and drilling process, together with planning and engineering design work for the requisite power generation plant and the integration of the above and below ground works.

## **Petratherm well capitalised**

In line with its Paralana development path, Petratherm remains fully capitalised for its project commitments. The Company has over \$8 million in cash, the additional backing of a \$5 million 2007 REDI grant from the Federal Government and up to \$10 million initially from the Beach Petroleum joint venture for the next stage of work.

Accordingly, Petratherm is now in a position to commit to drilling the two Paralana heat exchanger deep wells and to continue to fund its expanding Spanish project portfolio.

The scheduled development path for Paralana provides for commercial viability at all stages - including small scale (7.5MW local market up to 30MW) and into Australia's National Electricity Market (between 260MW and 520MW).

In Spain, the advanced Madrid project already has three wells drilled to depths of 3.1 to 3.5 kilometres by earlier oil explorers – providing information about temperature and hot water flow rates, and geological data.

This provides the opportunity for significant and low cost project advancement over 2007.