



PETRATHERM LIMITED
ABN 17 106 806 884

Petratherm uniquely positioned for Success in the Australian & Spain and increasingly Global Energy Sector

Petratherm Managing Director, Mr Terry Kallis, will later this morning present an update on the Company's activities to first day of the 2008 Paydirt South Australian Resources & Energy Investment Conference in Adelaide.

The key message of his presentation is that the **Company is uniquely positioned for success in the geothermal energy sector in Australia & Spain and increasingly globally.**

The address to the Investment Conference, entitled '**Building a Portfolio of Quality Geothermal Energy Projects – Australia and Overseas**' (refer attached and PTR website), outlined Petratherm's emerging leadership in the geothermal energy sector and covered an number of key points, as follows :

- **Petratherm's mission is** "to explore for and develop, emission free, geothermal energy project, that are commercially sustainable".
- **Petratherm's business model is** "to develop a portfolio of quality geothermal energy projects conventional and EGS – for power and/or heat – where there is a favourable combination of geology and market conditions – and introduce joint venture partners with skills, risk appetite and funding ability to further develop projects through to production".
- **Petratherm's innovative exploration model** and process developed in collaboration with the University of Adelaide has positioned the Company to be able to **"explore for heat" and to quickly assess the viability of geothermal projects** (engineered geothermal systems (EGS), conventional & district heating) – across a variety of geological settings, end use markets and regulatory regimes in various countries.

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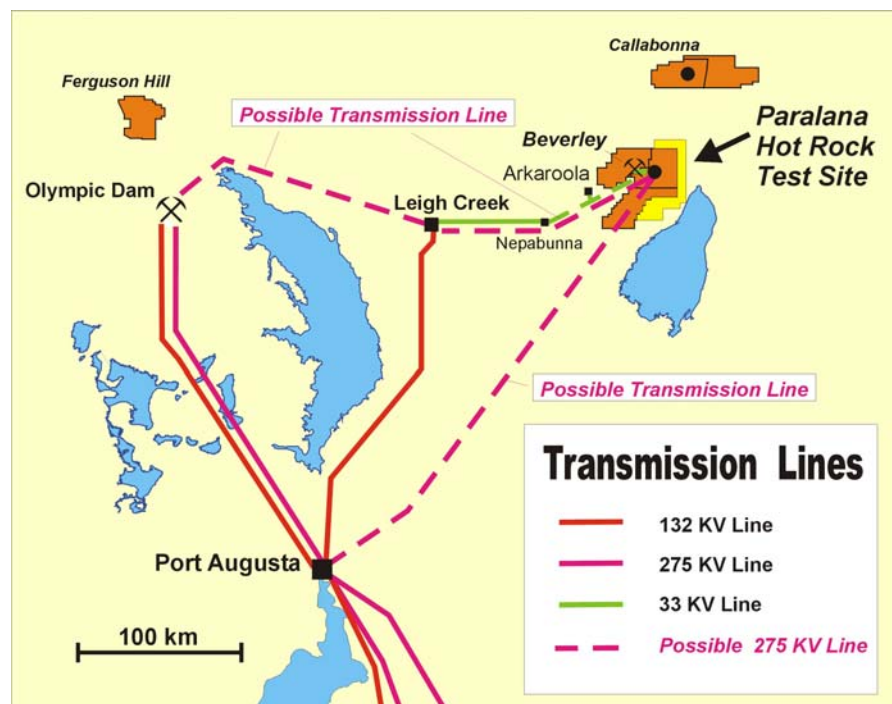
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- The Company's **strength in geothermal energy exploration has enabled it to create a portfolio of 11 quality geothermal energy projects in Australia and Spain, and soon in China** – where Petratherm has an exclusive Agreement with four Chinese Government Institutions to identify new projects. Of particular importance has been Petratherm's move over the past year into Spain where it has secured strategic 'first mover' advantage with seven projects, including near the large electricity consumption markets of Madrid and Barcelona.
- **Petratherm's unique Heat Exchanger Within Insulator (HEWI) Exploration Model has the potential to considerably reduce cost and risk**, and thus bring forward the viability of large-scale geothermal projects in Australia and indeed overseas - a key point acknowledged by the Federal Government in awarding Petratherm a \$5M REDI Grant towards developing the HEWI Model at the Company's flagship Paralana Geothermal Project site near Leigh Creek in South Australia.
- **The prospects for the Company's seven Spanish projects are very encouraging.** This assessment was made following visits to the sites by Petratherm's Australian and Spanish representatives and the recent confirmation of the availability of data from previous deep oil and gas wells. **In particular, the Madrid project has potential for both District heating and EGS developments.** The Madrid license area has five wells drilled to depths of between 1.5 to 3.4 kilometres – providing critical temperature, hot water flow rate and geological data. This provides the opportunity for significant and low cost, project advancement and is being utilized in **current Pre-Feasibility of the Madrid Geothermal District Heating (GDH) Project (to be finalized in early May 2008).**
- **The Madrid GDH project exhibits similar temperatures and flows at similar depths to those of the Paris basin** where district heating has been operating for over 20 years and around 260 MW of thermal capacity is installed in 34 doublets. The Geo-Madrid existing doublet shows temperatures of 75°C, flow rate of 200m³/hour at 1500 metres. **The Madrid EGS project will focus on the northern part of the license area where the existing Pradillo deep well (3,400 metres) shows a temperature of 156 °C.**
- The Paralana Project has now assembled all the key 'ingredients for success' including:
 - **An excellent thermal resource** at shallow depth – estimated at **200°C at 3.6 kilometres.**
 - **The highest recorded heat flow on mainland Australia of 128 mW/m²**
 - **A stable geological formation with expected good drilling conditions.**
 - **Close proximity to a willing potential customer, Heathgate Resources** – Beverley Uranium Mine, that currently pays 'off-grid' prices.
 - **A joint venture with a leading oil and gas explorer and producer, Beach Petroleum Limited, for up to \$30 million** in which Beach will take the lead role in the drilling operations required to create the underground heat exchanger.
 - **A \$5 million Renewable Energy Development Initiative (REDI) Grant** from the Federal Government to assist in the creation of the underground heat exchanger.
 - **Securing, on an exclusive basis specialist Swiss-based EGS consultants – Geothermal Explorers,** to assist the development of the HEWI model

- **A unique and realistic long-term commercialization path** that provides the potential for commercial viability at all stages including small scale (i.e. 7.5MW), local market (up to 30MW) and into the National Electricity Market (NEM) (between 260 and 520MW).
- The next steps in the development of the Paralana Project include:
 - **Spudding of the first deep well** (up to 4 kilometres) in the second half of 2008
 - **Application for Federal Government “Drilling Fund”** support for the two deep well program – second half of 2008
 - **Drilling of second deep well** – 3 to 6 months after the first well
 - **Application for Federal Government “Renewable Energy Fund”** – for a 30 MW demonstration plant – in 2009
 - **Long term circulation test** in mid-2009
 - **Production of first power to Beverley Uranium Mine** – early/mid 2010.
- The Paralana Project is considered **uniquely positioned to enable commercial viability at small scale (7.5MW building over time to 30MW)**, an important factor in the development and “bedding down process” of any new technology. This is a direct result of the close proximity of the Beverley Uranium Mine and the current ‘off-grid’ prices.
- Large-scale development of the Paralana site – following the development and “bedding down process” - also provides a unique opportunity for Petratherm’s Paralana Project with flexibility and significant cost benefits associated with **potential large-scale transmission network solutions to competitively access the NEM at Port Augusta and/or Olympic Dam** (refer below)



- The planned delivery of large-scale power (up to 520MW) has taken into account the capacity of the market to digest large increments of generation competition from other geothermal and indeed traditional sources of power generation and the cost of delivery (transmission network) of electricity to the ‘on-grid’ market (NEM).

- Petratherm’s two basic network solutions include:
 - ***A double circuit 275kV transmission line from Paralana to Port Augusta capable of delivering 520MW into the NEM at Port Augusta.*** (“Radial network solution”).
 - ***A single circuit 275kV transmission line from Paralana to Port Augusta and a single circuit 275kV transmission line from Paralana to Olympic Dam, each capable of delivering 260MW to those entry points.*** (“Meshed network solution”).

- The latter network arrangement would create a “meshed” transmission network in the north of the State and provide a backbone of electricity infrastructure for the remote community, but in particular the State’s growing resources sector. Importantly, the “meshed” network solution has the potential to provide substantial broader community benefits and hence has the potential for the inclusion of a proportion of assets (and costs) into the regulated asset base of a registered transmission owner under the Australian National Electricity Rules (NER). ***Accordingly, there is unique opportunity for substantially reducing the overall project network connection costs.***

- Petratherm aims to continually increase shareholder value through:
 - **Cost Reduction**
 - HEWI Model – shallower wells reducing drilling costs.
 - Competitive sourcing of plant and equipment – “no ties” to a plant manufacturer – “fit for purpose” – conventional, lower cost plant.
 - **Risk Reduction**
 - Initial project selection – targeting lowest cost to relevant market.
 - HEWI Model – shallower wells, less drilling, greater permeability.
 - Several quality projects and a continuous pipeline of projects.
 - Project portfolio spread across jurisdictions – local and overseas.
 - Partner selection – key skills and capabilities – Beach Petroleum.
 - EGS and lower risk conventional geothermal projects.
 - **Revenue Optimization**
 - Target local “off grid” opportunities – nearby mines.
 - Exploit multiple products – electricity and direct use heat.
 - Focus on attractive jurisdictions price and growth – Spain/China.

Yours faithfully



Terry Kallis
Managing Director

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