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## **\$5 million Federal grant offer for Petratherm's Paralana Project in SA**

Petratherm Ltd is delighted to announce that it has been offered a \$5 million Renewable Energy Development Initiative (REDI) Grant by the Commonwealth Government.

The \$5 million REDI grant offer was made to Petratherm in a joint announcement by the Hon Ian Macfarlane, Minister for Industry, Tourism and Resources and the Hon Malcolm Turnbull, Minister for the Environment and Water Resources.

The grant funds have been offered to Petratherm to develop the next stage of its Paralana Geothermal Energy Project, 130 kilometres east of Leigh Creek. This will involve the creation of an underground heat exchanger within the insulating rocks above the granite heat source, that is, Petratherm's HEWI Model (Figure 1) and will require the drilling of two wells and establishing circulation of water between those wells.

The HEWI model, whereby heat is collected from hot sedimentary rock layers at depths of 3-4 kilometres rather than harder granites at much greater depths, has been recognized by the Commonwealth Government as a new technique that represents a creative departure from existing approaches.

In addition, the Government has noted that, if proven, Petratherm's HEWI approach could become best practice and could greatly reduce cost and risk, and thereby accelerate the uptake of sustainable, large-scale, geothermal electricity generation.

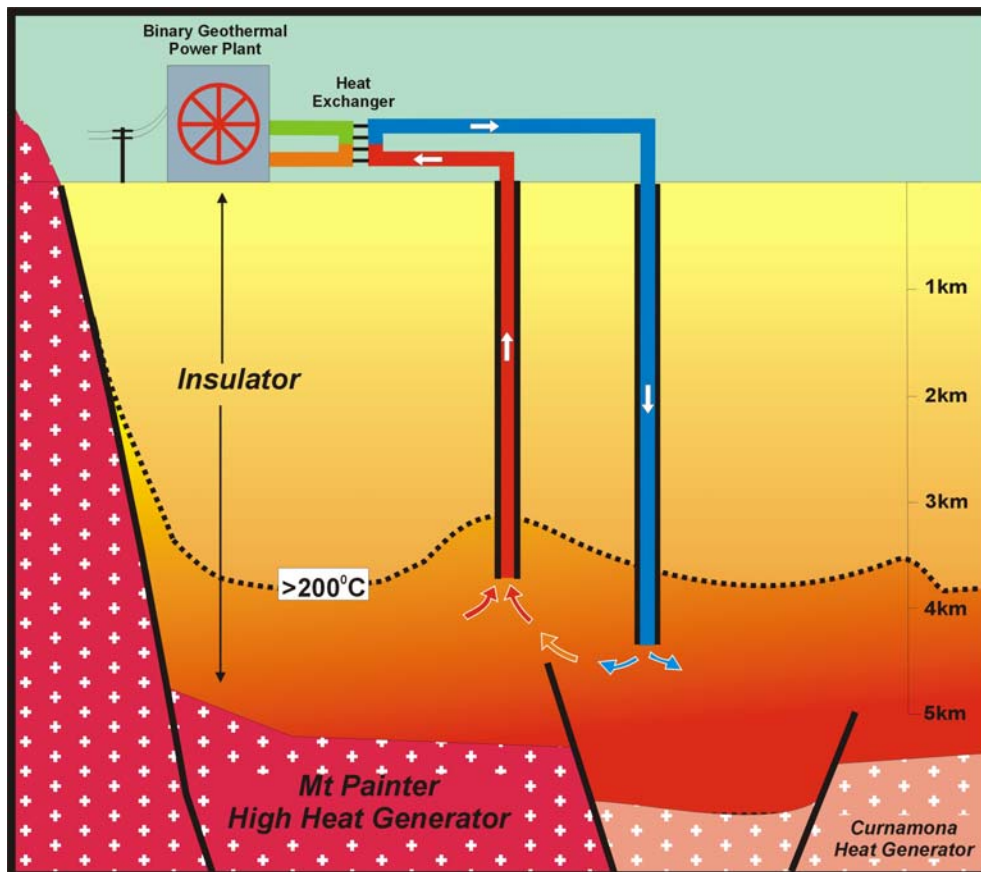
The \$5 million grant offer will form part of Petratherm's contribution to the Paralana Energy Joint Venture recently announced with Beach Petroleum, in which Beach Petroleum has the right to contribute \$10 million to the creation of the underground heat exchanger to earn a 21% equity stake in the Paralana Project. The total cost of this stage of work is estimated at \$20 million.

Following the successful completion of the underground heat exchanger Beach Petroleum has an option to increase its equity in the project by a further 15%, to a total of 36% for an additional contribution of \$20 million.

In the announcement the Government also noted the potential for around 10% of Australia's total electricity consumption realistically being provided by 2050 from geothermal energy.

The Government has acknowledged that Petratherm's Paralana Project would bring forward and improve the likely viability of geothermal projects across the country, notably in South Australia where a number of geothermal systems are planned.

Moreover, the Government has indicated that large-scale, geothermal power plants have the potential to substantially reduce Australia's carbon dioxide emissions, while providing secure and reliable energy.

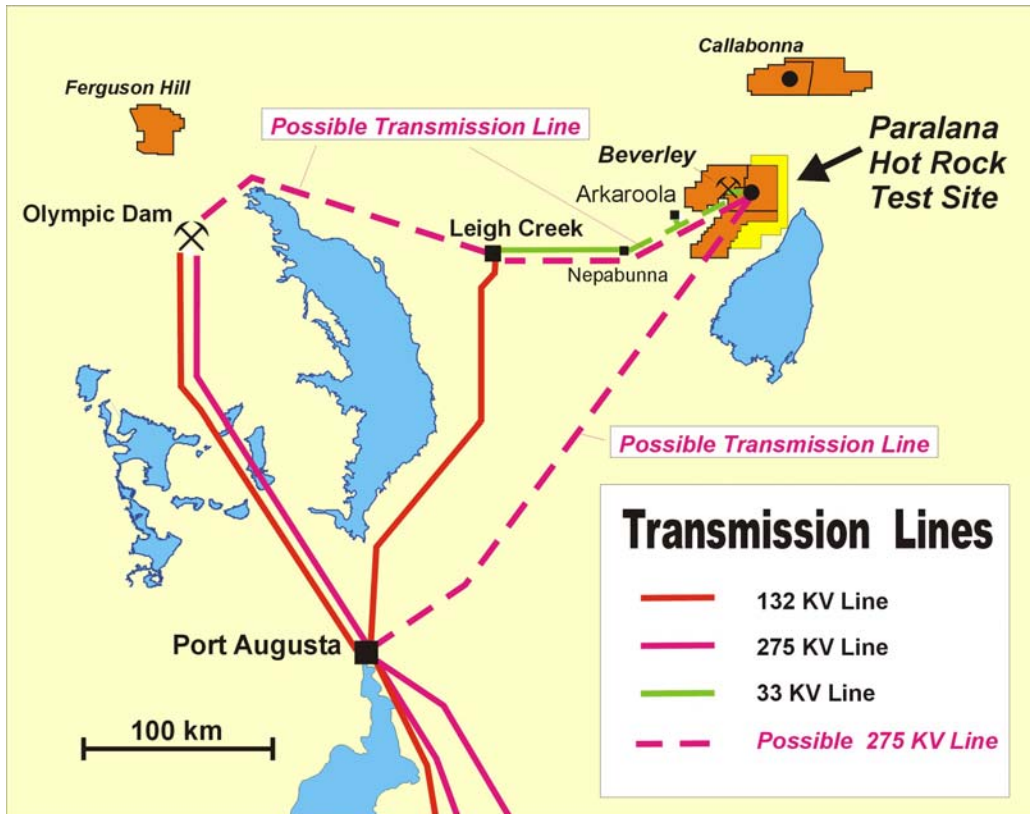


**Figure 1** The Heat Exchanger Within Insulator (HEWI) Model.

The Paralana Project (Figure 2) is Petratherm's flagship Project that aims initially to provide base-load electricity to the local market – the growing needs of the Beverley Uranium Mine, from around 7.5 MW building to 30 MW – and then expanding to around 520 MW and supplying the National Electricity Market, via two entry points, namely, Port Augusta and Olympic Dam.

The recent Joint Venture deal with Beach Petroleum and the Commonwealth Government REDI Grant have provided the lion's share of project funding, critical technical expertise and third party endorsement of Petratherm's approach and the potential of its Paralana Geothermal Energy Project.

This provides a strong base upon which the Board of Petratherm can move forward in earnest to commercialise the Paralana Project.



**Figure 2** Petratherm geothermal licence areas and possible transmission connection routes for the Paralana Hot Rock site.