Carpenter Backs Geothermal Energy To Power Second Desalination Plant

xploration for geothermal energy sources in Western Australia has received a boost following a recent announcement from Premier Alan Carpenter that the state's second desalination plant, estimated to cost about \$1 billion, will be powered by 23 MW of renewable energy annually.

"There is a very exciting prospect with geothermal energy technology potentially being available for base load power in the southwest of Western Australia in coincidence with the time lines we are talking about here (for the new plant)," he reportedly said.

Speaking at the Western Australian Chamber of Minerals and Energy's 2007 annual general meeting, Carpenter said the state government is very excited about the prospects of geothermal energy.

"We know there are companies interested in exploration licences for geothermal resources", Carpenter said. "We believe there are synergies between deep drilling for hydrocarbons and for geothermal resources which Western Australia can capitalise upon through our existing expertise in the oil and gas industry."

"As a result, the government will introduce new legislation to help facilitate this new industry. This will create legislative guidelines for geothermal exploration projects in Western Australia, covering the two main types, hot dry rock energy and more conventional geothermal energies."

On 15 May, Carpenter announced that a second seawater desalination plant powered by renewable energy, will be Western Australia's next major water source and is expected to be operational by 2011. Carpenter shelved Water Corporation plans to utilise the South West Yarragadee aquifer for the integrated water supply system.



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"The internationally acclaimed wind-powered Kwinana seawater desalination plant has demonstrated that large quantities of water from an unlimited ocean supply can be provided using a clean and green process", he said.

The proposed site for a second desalination plant is at a Water Corporation waste water treatment facility on Taranto Road north of Binningup. The new plant will provide at least 45 GL of water a year into the integrated water supply system by the end of 2011, with potential to increase to 100 GL.

The Water Corporation has advised that the estimated cost of building the second desalination plant will be \$640 million. An additional \$315 million will be required for integrating it into the water supply system.



Western Australian Premier, Alan Carpenter, and former Premier, Geoff Gallop, at the official opening of the Perth Sea water Desalination Plant at Kwinana on 12 April 2007. Carpenter is keen on using geothermal energy to power the second desalination plant due to start production in 2011.