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## **Current Status of Pebble Bed Modular Reactor Development in ESKOM**

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### **Abstract**

Pebble Bed Modular Reactor (Pty) Ltd's investors, the South African electricity utility Eskom, the Industrial Development Corporate of South Africa and the US nuclear company Westinghouse, share the vision of small, standardised, inherently safe, modular reactors as one of the best carbon-free alternatives for new power generation capacity around the world.

The PBMR company is currently preparing for the construction of a commercial scale power reactor project at Koeberg near Cape Town and a fuel plant at Pelindaba near Johannesburg. The current schedule is to start construction in 2009, and for the first fuel to be loaded four years later.

The PBMR project enjoys solid support from the South African government, who regards it as one of the most important capital investment and development projects yet undertaken in the country. The project has assembled one of the most innovative nuclear reactor design teams in the world. In addition to the core team of some seven hundred people at the PBMR head office in Centurion near the City of Tshwane, more than a thousand people at universities, private companies and research institutes are involved with the project.

While PBMR initially focused mainly on electricity generation, process heat applications have emerged as a lucrative potential market for High temperature, gas-cooled reactor technology. Furthermore, the PBMR is being investigated for use in industrial process applications.