

The development of a geothermal power plant preliminary cost estimator - Stage I: basic estimates

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The aim of the present investigation is to develop the first stage of a cost estimator for power generation under conditions typical of those that apply in South Australia. In particular the project aims to provide a method to adapt results obtained from the existing MIT cost estimator to account for the effects of ambient temperature on performance using air-cooled condensers.

It should be noted that the commencement of the project has been delayed due to the late confirmation of funding. Also, the part-time nature (0.2 FTE) of the appointment has resulted in the need to prioritise the Research Officer's tasks on other programs to date. Nevertheless, some significant progress has been made.

Importantly the Research Officer, Mr David Battye, has been appointed. David is the final stages of completing his PhD, and has acquired significant experience in the field, having performed a number of contract research programs in closely related geothermal energy projects.

The first stage of the work has been to develop models to estimate the performance of ambient temperature on the performance of a range of geothermal cycles. This work has been completed, and was presented in the recent AGEG conference by Mr Battye.

The other components of the proposed work are scheduled for completion in mid-2009.