## Objection to Snowy 2.0

The distance between upper and lower storages (Tantangara and Talbingo) would be longer than any other hydro project of its type. Thus overcoming friction losses, both in producing power and pumping back up, means increased requirements for larger tunnels, pipes, pumps and infrastructure.

The cost, as I understand, has already blown out to \$10 billion, which could be used in alternative technologies.

The energy storage and usage capacity has been massively overstated for the reason that ponds have to be low entering winter and spring to obviate overtopping of a 1-in-10 year flood.

Drought and further worsening of climate change may mean even less water available.

If Talbingo is full how can any flow from Tantangara be allowed and even if Talbingo is allowed to generate, this offsets any generation from Tantangara.

Talbingo has an active storage of 160 GL whereas Tantangara has 239 GL therefore the maximum output of Tantangara could never be achieved.

The round trip efficiency of the pumping/generation cycle is estimated at only 67% for 2000MW, that is if it ever generated 350 GWh it would need 500 GWh to recharge the dam.

Its location implies at least 10% transmission losses both when providing power to the net and when obtaining power to pump back up. That is it would need 170 units of power off the grid to be able to supply 100 units to the cities.

No predicted transmission losses have been provided, and as I understand it, more transmission lines and infrastructure would be needed.

A cost of \$10 billion has been mentioned and when the evidence of the S.A. Tesla battery is taken into account, one must ask. Would that money, if spent on distributed 'big' batteries around the net provide a better option than one storage type, with its losses so far from the cities.

As a comparison, even a home battery provides better than 85% round trip efficiencies.

The EVIDENCE from South Australia shows that that \$10 billion could be much better spent, with higher efficiency on smaller more distributed and efficient hydro or big batteries.

The CSIRO has identified 100's of sites for hydro power.

This project has just been designed to prop up the coal generators.

I wish to acknowledge that much of my information has been derived from the NPA report but there are also many technical aspects I have not noted but derived from RenewEconomy web site.

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