19 June 2003

The Hon Grant Tambling
MRET Review Panel
GPO Box 621
Canberra ACT 2601

E-mailed to: mret.review@greenhouse.gov.au

Dear Chairman and Review Panel Members,

**Snowy Hydro Limited Supplementary Submission –**
**Review of the Renewable Energy (Electricity) Act 2000.**

Snowy Hydro Limited (Snowy Hydro) appreciated the opportunity to meet with the MRET Review Panel and Secretariat on Friday the 6th of June. We believed it was a productive meeting that highlighted a number of issues and solutions that will contribute to the success of the Renewable Energy (Electricity) Act 2000.

Snowy Hydro will play an important and significant role in maintaining the existing 16,000 GWh renewable energy base which is imperative if the overall MRET objectives are to be met. The current MRET legislation creates significant incentives to maintain ageing assets and upgrade these assets to increase additional renewable energy output.

Snowy Hydro's approximate planned capital expenditure for the next 10 years totals $279 million.

It is difficult to reference what level of capital expenditure is specifically related to MRET financial incentives especially in the long term given the present climate of regulatory and policy uncertainty. However, our best estimates is that MRET incentives will justify at least $55 million worth of investment in the next 3 years. These investments are premised on the MRET methodology on baselines remaining unchanged. Conversely, the introduction of an 'unders & overs' or cumulative baselines will result in cancellation of this investment.

**Snowy Hydro believes that any fundamental changes to baselines such as the incorporation of 'unders & overs' or cumulative baselines threatens Snowy Hydro's continued participation in the MRET due to significantly increased financial business risk and cash flow uncertainty.**

If the MRET Panel wants to address some industry concerns surrounding the baselines for existing renewables then we recommend that the real problem needs to be identified in the first instance. As highlighted in our presentation to the MRET Panel, implementing 'unders & overs' won't alleviate the problem but will threaten Snowy's on-going participation in the MRET thereby increasing the cost of meeting the MRET objectives.

In Snowy Hydro's detailed submission we highlighted that up to 196 GWh per annum of cost effective renewable energy is at risk with the incorporation of an 'unders & overs' approach to baselines. This reduction will erode the 16,000 GWh base that

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was assumed to exist to 2020 for the MRET objectives to be deemed successful. This outcome would be perverse from a MRET perspective but is inevitably a result of a forced change in operational strategies leading to less efficient turbine operation and increased risk of water spillage. Based on this years REC target of 1,800,000 RECs this potential loss represents 11%. This is a significant amount and could consequently lead to an increase in costs to customers as RECs will need to be sourced from alternative sources.

We strongly believe that encouraging existing large hydros to invest in innovative upgrades and maintaining existing plant will be vital factors in meeting the MRET objectives of additional renewable energy and a reduction in greenhouse gases at the minimum cost to the economy.

Our estimates indicate that over the life of the measure any disincentives on Snowy Hydro to actively participate in the MRET could lead to a 3142 GWh reduction in renewable energy. Investments being made by Snowy Hydro and other large scale hydro generators are having a significant and measurable impact on industry development in accordance with the objectives of the MRET scheme. **This is leading to an increase in Australia's international competitiveness and helping to develop our export potential for these innovative technologies. Hydro related industry development is also helping local economies by stimulating employment and economic activity.** Specific examples of hydro related industry development as a direct result of the MRET incentives includes:

- High efficiency hydro turbine development contracts being awarded to Australian based companies and new hydro turbine runners being manufactured in Australia. For example Snowy Hydro, has invested in turbine runner upgrades such as the Murray 2 runner upgrade from 550MW to 620MW. This project will increase turbine efficiency to allow more energy output per megalitre of water. The committed capital cost is approximately $8 million. This technology can be used on other hydro stations. For example, Snowy Hydro is conducting advanced feasibility studies of turbine runner upgrades for the Tumut 3 power station with expected expenditure of $18 million. Any fundamental changes to baselines such as incorporating 'unders & overs' threatens the commercial viability of these projects. Such changes will also introduce sovereign risk to investments which are made on the pretense of a stable policy environment ;
- MRET has stimulated the development and manufacture of mini hydro turbine sets. For instance, Snowy Hydro is out to tender for equipment and construction of the Jounama and Jindabyne mini hydros. These plants will deliver approximately 15MW and approximately over 60GWh of additional renewable energy per annum. The capital cost for these projects is in excess of $17 million. Snowy Hydro is also exploring additional mini hydros at other sites including Khancoban, Tantangara, Happy Jacks, Providence Portal, Section Creek, and Blowering potentially worth over 12MW and 45GWh of additional renewable energy. The expected expenditure for these projects is in excess of $12 million. Baseline changes will inevitably make these projects unviable by significantly increasing business risk and cash flow uncertainty; and
- MRET has stimulated some very innovative plant improvements and new developments such as the Tumut 3 micro hydros. Snowy Hydro is installing 6 new micro hydros with a total output of 840kW on the existing cooling water systems on each of the 6 generating units at Tumut 3 Power Station. These

micro hydro units will capture an existing wasted renewable energy source. The micro hydro units are being developed from Australian manufactured standard pump sets applied to an existing hydro power station water system and are representative of the type of innovation driven by MRET incentives. Baseline changes such as incorporating 'unders & overs' would remove incentives to innovative initiatives (such as the micro hydros) that extract additional renewable energy.

Snowy Hydro advocates increasing the target by a modest amount such as 5% which has been shown by macro economic modelling to have a zero negative effect on Gross Domestic Product. We also express concern about our interconnected system baseline which is preventing legitimate mini hydro development. For further analysis and explanation of this issue please refer to Snowy Hydro's submission which can be viewed at http://www.mretreview.gov.au/list.html (submission number 86).

**In summary, Snowy Hydro believes the MRET is working as intended and should be left fundamentally unchanged.**

Snowy Hydro looks forward to further contributing to the MRET Review. We welcome further discussion of our issues and if we can be of assistance in any way then please contact Roger Whitby, Executive Officer Trading, on (02) 9278 1885.

Yours sincerely,

Terry Charlton
Managing Director

cc: The Hon Dr David Kemp
The Hon Ian Macfarlane
The Hon Joe Hockey
Mr David McCarthy – MRET Review Secretariat