

**Loy Yang Marketing Management Company Pty. Ltd.**

**AGL Hydro Pty. Ltd.**

**International Power (Hazelwood, Synergen, Pelican Point, Loy Yang B and Valley Power)**

**TRUenergy Pty. Ltd.**

**NRG Flinders Pty. Ltd.**

**Hydro Tasmania**

4<sup>th</sup> September 2006

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Australian Energy Market Commission  
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**PROPOSED NATIONAL ELECTRICITY AMENDMENT (MANAGEMENT OF NEGATIVE SETTLEMENT RESIDUES BY RE-ORIENTATION) RULE 2006 AND DRAFT NATIONAL ELECTRICITY AMENDMENT (MANAGEMENT OF NEGATIVE SETTLEMENT RESIDUES IN THE SNOWY REGION) RULE 2006**

This submission is in response to your letter of 31<sup>st</sup> August 2006, drawing our attention to the Snowy Hydro submission to the Commission dated 28<sup>th</sup> August 2006 on behalf of the above group of companies, the "Southern Generators".

The Snowy Hydro letter identifies two issues which are claimed to threaten Victorian supply reliability in the coming summer if the Southern Generators Rule change is implemented namely;

- an alternative risk management strategy which Snowy Hydro claim they need to adopt in relation to the Geehi pond storage levels to manage or avoid forced generation as a consequence of the implementation of the Southern Generators proposal, which is compounded by,
- low storage levels in Lake Eucumbene as a consequence of the lower than normal inflow conditions

These issues have been raised privately with the ACCC and NECA by Snowy Hydro as its submission notes and we understand with the Victorian jurisdiction earlier in the consultation process. To our knowledge none of these bodies have seen fit to raise the issue as a concern during the consultation process.

At the time the issue was discussed with the Victorian jurisdiction we sought independent advice (which was discussed with Victorian Government officials - copy attached) which demonstrated that,

- The market arrangements allow Snowy to manage “forced generation” now, to cater for the risk of summer storm inflows and no change is contemplated to the relevant provisions. Hence no reduction of storage level in Geehi is justified to avoid spillage or waste of water.
- Even if the storage level in Geehi were lowered, the impact on security of supply in Victoria is unlikely to be material, because even if the storage level were reduced by half its range, the effect on energy available over a one week period is minimal. (We note that the main threat to security in Victoria arises during brief periods of hot weather)

This means that:

- the implementation of the Southern Generators Rule Change itself would not require Snowy Hydro to operate their storages differently, and
- even if they chose to operate differently, in the way they described, this would not materially decrease supply reliability in Victoria, and
- although generally low storage levels due to the drought will impact on Snowy Hydro’s production capability, this will occur whether or not our Rule change proposal succeeds.

If the current low inflow levels are a threat to supply reliability to Victoria in summer periods, then this is a matter that Snowy Hydro should be addressing with NEMMCO through the MT PASA process.

It is worth noting that neither our proposal nor the Snowy Hydro reorientation proposal impact the physical capacity of the network to supply at times of high demand, only the prices received. Furthermore, although storage positioning is a matter for Snowy Hydro to determine, we do not believe that in practice Snowy Hydro would forego commercial opportunities to supply into Victoria when scarcity threatens there, simply because, without NEMMCO intervention they would receive only the true market value, ie efficient prices, in the very rare circumstances of being forced to generate because of un-forecast high inflows.

In short, we see this threat as not credible.

If you wish to discuss any aspect of this submission, please contact Roger Oakley on 03 9612 2211.

Yours faithfully

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## **GEEHI STORAGE LEVEL AND VICTORIAN SECURITY OF SUPPLY**

### **Background**

Snowy Hydro have apparently indicated to the Victorian jurisdiction that unless they get certain changes that they seek in the market settlement process, then Snowy will be forced by their limited market access to reduce the level at which they hold Geehi reservoir, and that this would reduce Victorian security of supply.

This note critically examines these propositions.

### **Is the market settlement arrangement relevant to the management of forced generation?**

The Snowy proposition relates to their ability to generate when necessary to avoid spill of water. (Water spill from Geehi would not only waste resource but would do significant environmental damage)

Generation of this type, ie when necessitated by plant or external factors, is already dealt with in the NEM by a specific provision, regardless of the other details of the dispatch and pricing arrangements. Generators are able to make “inflexible” offers which allow such generation whenever it is physically feasible for the network to accept it.

Hence the changes proposed to the market settlement arrangements do not alter the ability of Snowy Hydro to manage generation when necessary to avoid spill.

### **Does Geehi level have a material impact on the security of supply in Victoria?**

If we consider the case of a supply crisis in Victoria only, or alternatively in the group of market regions south of Snowy, the following limits are relevant.

|                                           |         |
|-------------------------------------------|---------|
| Maximum import into Victoria from Snowy   | 1900 MW |
| Maximum southward flow within Snowy       | 1300 MW |
| Hence maximum needed from Murray stations | 600 MW  |

The capability to divert water from long-term storage at Eucumbene to the shorter-term storage at Geehi is equivalent to about 500 MW of generation in the Murray stations.

By using a small daily cycling of Geehi storage level this diverted water can be used to supply 600 MW for 20 hours per day. Given the normal daily cycle of electricity customer demand, it is improbable that any security issue would persist for as long as 20 hours in a day.

The need for significant use of Geehi stored water to meet Victorian security needs is highly improbable.

Furthermore a reduction of Geehi level by up to one half of the available range has only a minor effect on the stored water available to meet a typical security issue.

This is because only part of the stored water in Geehi is available within a one week period, and supply crises do not normally exceed one week.

The limitation on the drawdown of this storage is due to the geology of the reservoir site. At the normal upper level of storage, the energy available from drawdown within a week is about 13 GWh. If the initial storage level were reduced by half the available total range, the energy available from storage drawdown in a week would be about 10 GWh instead of 13 GWh.

Even in the unlikely event that net storage drawdown were required, the lowering of the initial storage level has a relatively minor effect on the availability of stored water within a one week period.

## **Summary**

**The market arrangements allow Snowy to manage “forced generation” now, and are expected to continue to do so. Hence no reduction of storage level in Geehi is justified.**

**Even if the storage level in Geehi were lowered, the impact on security of supply in Victoria is unlikely to be material.**