



Hydro Tasmania
the renewable energy business

19 June 2008

Dr John Tamblyn
Chairman
Australian Energy Market Commission
PO Box A2449
Sydney NSW 1235

By email: submissions@aemc.gov.au

Dear Dr Tamblyn,

Ramp rates, Market Ancillary Service offers and Dispatch Inflexibility

Hydro Tasmania is supportive of the AER proposal to limit the ability of the market to utilise technical parameters in cases where power system security could be compromised. While Hydro Tasmania believes the system security issues have generally been well addressed by the proposal, we are very concerned about one element, namely the concept of a fixed minimum ramp rate which is independent of generator size. This will not create a level playing field and will penalise smaller units unfairly.

It is stated "The AER believes that the various references to ramp rates in the NER indicate that the bidding and re-bidding of ramp rates is intended to be linked to the technical characteristics and/or physical constraints associated with generators plant or equipment." Hydro Tasmania agrees with this statement.

Hydro Tasmania appreciates the significance of the challenge of providing a solution that achieves all objectives, however given the current solution allows for the utilisation of technical parameters, ramp rate, for commercial reasons, it believes a level playing field is important in any proposed change. This is further re-enforced by the fact it is proposed to allow minimum ramp rates to be bid outside any "good faith" bidding provisions.

Minimum Ramp Rate – Size of Generator Unit

While the AER has explored various options and outlined their respective benefits and issues Hydro Tasmania believes an important issue arises with the chosen solution which has not been discussed in the Rule change proposal. While the option does not discriminate between machines with slow ramp rates and fast ramp rates, as highlighted in the paper, Hydro Tasmania believes it does discriminate on unit size. The current proposed remedy, a blanket minimum ramp rate applied to all generators, creates an imbalance in the playing field between large and small generators resulting in potential transfers of wealth to larger generator units.

This can be demonstrated with the following simplified example:

Consider a competitor A with a single 600 MW plant relative to a competitor B that has a portfolio of 10 x 60 MW plants that sit behind a network constraint. It is assumed neither has a technical reason for bidding less than the minimum requirement. A binding

constraint limiting generation to a maximum output of 1035 MW comes about. Each competitor then has an incentive to be dispatched at maximum output and they bid/rebid their energy accordingly and bid their ramp rates to the minimum available (3 MW/min).

The resultant dispatch outcome (for 5 min) is a significant difference in dispatched generation as shown below:

Competitor A = 585 MW

Competitor B = 450 MW

In such circumstances Competitor B will be severely disadvantaged, a result of the fixed minimum factor being equally applied to each generator. Depending upon the magnitude and form of the constraint the impact can continue to increase with future dispatch intervals.

Minimum Ramp Rate – Enhanced Proposal for Level Playing Field

Hydro Tasmania believes the situation may be **addressed by having a minimum rate proportional to the registered unit size**. This could take the form - *minimum ramp rate equals one percent of registered capacity rounded up to the nearest whole number*. In the example above:

600 MW unit minimum ramp rate of 6 MW/min

60 MW unit minimum ramp rate of 1 MW/min.

Any unit that has verifiable technical reasons that impact its ability to meet this requirement would still be able to bid at a lower ramp rate. This would level the playing field with regard to the size of the generator unit. NEMMCO may be able to recommend an alternative percentage that is more aligned with the objective of system security.

AER has acknowledged the issue is likely to become a greater issue with transmission congestion likely to increase over time. Hydro Tasmania is also of the view that transmission congestion is an issue in the NEM and likely to become increasingly a larger issue. As a result it has an expectation minimum ramp rates will increasingly be bid for commercial reasons. While “analysis of bids for 2007 shows that all except for a handful of generators bid at 3MW/min or greater most of the time” it is the periods when congestion is an issue that becomes important with regards behaviour and assessing market impacts of any rule change.

While Hydro Tasmania agrees the significant benefit of the rule change is associated with the measures to maintain power system security it believes any rule change should attempt to minimise any transfer of wealth impacts by creating a level playing field between generating units of varying size.

If you have any queries please contact David Bowker on 6230 5775 or via email on david.bowker@hydro.com.au.

Yours sincerely



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