24th February 2015

Australian Energy Market Commission
PO Box A2449
Sydney South NSW 1235

Submission lodged online at: www.aemc.gov.au

Project Number: ERC0165

Dear Mr Pierce

Generator ramp rates and dispatch inflexibility in bidding, Options Paper – Supplementary Submission

Snowy Hydro makes this supplementary submission in response to AEMO's submission dated 5 February to the Options Paper. While we appreciate AEMO's initiative in undertaking analysis as part of their submission we would like to highlight how some of AEMO's observations stemming from their analysis could be inappropriately misinterpreted.

Firstly we support AEMO's confirmation that Options 1 and 2 and well as the preferable draft rule provide sufficient ramp rate capability for AEMO to manage power system security. This supports Snowy Hydro's view that although Option 1 results in slightly less aggregate ramping in some NEM regions this reduction would not undermine system security and results in a minimum ramping requirement which would best meet the AEMC's stated principles of:

1. Ramp rates are a commercial parameter;

2. Regulatory obligation on generators are set at a minimum required for AEMO to fulfil its system security obligations; and

3. Competitive / technology neutrality – The burden of system ramp rate capability must be applied consistently and proportionately to all generator units regardless of generator size, plant configuration, technology type, or market configuration.

In AEMO's submission on page 2 it states that:

"AEMO concludes there is not a strong correlation between unit output and low ramp rates, indicating that the number of individual units in service has not been a significant factor in lower ramp rates offered by Participants. This suggest that the existing provision that allows participants to offer ramp rates below the minimum specified in the rules provides sufficient protections to Participants for technical reasons"

Snowy Hydro disagrees with the observations in this paragraph for the following reasons:

- What Snowy Hydro offered in our Bids in the past (ie. in 2014) for ramping capability bears no resemblance to what we may offer in the future based on potentially a different set of Rule obligations. In reality 2014 was a benign and low wholesale market volatility year. In addition to this our power stations had high availability of individual power station units in each aggregate generator group. Hence it was no surprise that AEMO's analysis showed no strong correlation between aggregate unit output and low ramp rates. Future years may be more volatile with the potential for Spot price volatility and unforseen plant outages requiring ramp rate obligations which are commensurate with the number of physical units on-line in an aggregate generator group.

- The analysis misses the key point that we have made in our past submissions where we have stressed the need for competitive neutrality where the burden of system ramp rate capability must be applied consistently and proportionately to all generator units regardless of generator size, plant configuration, technology type, or market configuration.

  For example Murray aggregate group has up to 14 physical units comprising 10 × 95MW and 4 × 138MW units:

  If only 1 × 95MW unit was operating, Option 2 would impose a ramping requirement of 32 MW/minute for the Aggregate generator compared with only 2 MW/minute if the unit was disaggregated.

  In a simple analogy it is clear that when a physical is shut down or not on-line there is no ramping requirement placed on other generators in the Portfolio. The same should apply to units in an Aggregate group.

- Aggregate generators cannot rely of clauses 3.8.3A (c) – (e) of the Rules as adequate protection for submitting a ramp rate below the minimum regulatory requirements. We have interpreted these clauses as only being applicable for technical and safety reasons where the aggregate generator unit can submit a lower ramp rate. This does not address our key concern around equal treatment for all generators regardless of plant or market configuration. That is, the minimum ramping obligation should be based on the number of physical units on-line in the aggregate group or a proxy of this. To rely on this clause would subject aggregate generators to regulatory and compliance risks which would be an additional burden on aggregate generators which does not exist for individually registered generator units.

AEMO states on page 3 of their submission that, "Although Option 2 might appear to place a higher burden on Murray, it is equivalent to the ramp rate requirement without the units being aggregated". This statement is only factually correct if all individual units (14 in total) are physically operating or able to be operated 100% of the time. Clearly as shown in our example above depending on actual individual generator unit availability in the aggregate group the ramping obligations in Option 2 would be discriminatory to an aggregator generator group.

In summary, we appreciate AEMO's analysis but as highlighted in this submission we believe AEMO have mis-understood some of its findings. We have shown that Option 2 is grossly inconsistent with AEMC's own stated principles and is not supported. If this option is ratified aggregate unit generators would have no choice but to seriously consider disaggregating their generator units. This would be a perverse and inefficient outcome as aggregation is

recognised as an efficient mechanism to minimise the economic costs associated with dispatching generation plant.

Snowy Hydro appreciates the opportunity to make a supplementary submission to this consultation. Should you have any enquires to this submission contract Kevin Ly on kevin.ly@snowyhydro.com.au or on (02) 9278 1862.

Yours sincerely,

Roger Whitby

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