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Letter sent electronically to: submissions@aemc.gov.au

Consultation: Southern Generator Rule Draft Determination

Snowy Hydro Limited (Snowy Hydro) welcomes the opportunity to respond to the Southern Generators Draft Rule Determination. Our submission is based on observations from the Section 95 submissions to the Re-orientation alternative Rule change proposal to manage negative residues in the Snowy Region. Five (5) submissions were received to the Re-orientation proposal. These were from Snowy Hydro, the Southern Generators, NEMMCO, Westpac, and Origin Energy.

We refer also to our submission to the AEMC's consultation on our Re-orientation rule change proposal and request that the AEMC also considers this material in its consideration of the Southern Generators proposal.

We note that relatively few submissions have been received, that the submission by NEMMCO is brief and addresses implementation issues, and that the submission by Origin is supportive of the Reorientation proposal. The main purpose of this submission is to respond to points made in the submissions by the Southern Generators and Westpac.

The Southern Generators and Westpac define the problem in the Snowy Region narrowly and in doing so prefer a solution that does not address the wider issues associated with the Snowy Region and thus will not provide a satisfactory solution. In short, these respondents to the Re-orientation proposal are narrowly focused on dispatch efficiency and utilise full nodal pricing as their benchmark for determining efficiency.

However, market efficiency is much broader than dispatch efficiency. From this perspective we support the AEMC approach which takes a broader consideration with respect to the MCE policy direction¹ on Transmission and Regional boundaries to determine relevant assessment criteria to assess the alternative proposals to manage negative settlement residues in the Snowy region. In short, the AEMC's relevant key assessment criteria include:

- price impacts,
- impact on risk management,
- as well as dispatch (productive) efficiency.

Basing decisions on the criterion of dispatch efficiency alone would inevitably lead towards localised or a nodal pricing approach. This would be inconsistent with MCE policy in our view. We note and agree with the argument in Origin's submission that Re-orientation is closely aligned with the likely future

¹ See the MCE National Electricity Rules – Rule Change Request Reform of Regional Boundaries, http://www.aemc.gov.au/pdfs/reviews/Region%20Boundaries/submissions/000MCE%20Proposal.pdf; and CRA, NEM – Transmission Region Boundary Structure, September 2004.

direction for regional boundary change in the Snowy region, and so provides a transition path for participants.

Observations of Assertions from Submissions

<u>Assertion 1</u> – The Southern Generators state: "The modification to the <u>settlement</u> process proposed by the Southern Generators acts through avoiding distorted incentives for generator offers".

Snowy Hydro's interpretation of this statement is that the Southern Generators believe their proposal would lead to Murray generation revealing its marginal cost through dispatch offers.

We consider this is incorrect for two reasons. First, if we ignore the contracting position, the Southern Generators appear to consider that a price signal will create a simple incentive for Snowy's bids to reflect its costs. This suggests that Snowy Hydro will maximise its profits if it bids to be dispatched whenever the nodal price at the Murray (Snowy) node exceeds the opportunity cost of Murray generation.

However, the Southern Generators proposal would create a very sharp discontinuity in prices received for Murray generation. When a constraint occurs between Murray to Tumut for northerly flows, this would sharply reduce spot revenues. Assuming Murray simply received spot revenues, it is likely this would create an incentive to withhold and drive up prices, not simply to be dispatched when prices exceed cost.

Second, and more realistically, the analysis should take into account Snowy Hydro's contract position. The Southern Generator's proposal is a transitional measure, and so has to be implemented with existing contract positions. As we demonstrate in our Re-orientation proposal, after allowing for the impact of Snowy Hydro's contracting position, the Southern Generator's proposal provides strong incentives to either:

- 1) maximise Murray output, and drive down prices in the Snowy and Victoria regions, so partially hedging contractual exposure in Victoria; or
- 2) constrain Murray output to less than approximately 250MWs, in order to maintain higher prices in the Snowy region, and again partially hedge contractual exposure.

Under a range of circumstances the most likely (but not certain) commercial strategy is to withhold Murray generation.

In short the Southern Generator's proposal will not create incentives for Murray generation to reveal its opportunity cost in its generation offers. This is true regardless of whether Murray is exposed to spot revenues, or is acting to protect contract positions.

The Southern Generators submission defines the problem narrowly by simply assessing dispatch efficiency, and by assuming that nodal prices create incentives to reveal marginal costs. For the reasons set out above, this leads to simplistic and incorrect conclusions.

Assertion 2 – The Southern Generator's state that:

"In general therefore, participants make offers to achieve desired outcomes. The restraint on generators achieving maximal capacity dispatch by offering "too-low" prices is that ideally the spot market settlement they receive is <u>potentially</u> affected by their offer price. Where this breaks down, the resultant market dispatch may be economically inefficient. The only way to rigorously preserve efficient dispatch is by exposing generators to the risk of offers impacting on settlement."

This statement implies that the incentive on Murray generation to over produce is not governed by the settlement price it receives. This assertion is wrong. Under Re-orientation the price Murray receives is directly affected by the volume/price it bids, in exactly the same way that Loy Yang's volume/price bids affect the Victorian price. Under the Re-orientation proposal Murray output does and will affect the Spot price in Victoria. Hence the incentive to over generate and pull down the Victorian price is negated.

Snowy Hydro empathises that are no unique or special incentives for Murray to over produce. We note that Dr Darryl Biggar² effectively acknowledges this fact by stating:

"Under this approach [Re-orientation] Murray is paid the VIC price even though the efficient price for Murray output is significantly lower that the Vic price (in case of northerly flows). Murray has an incentive to respond by reducing its bids to the point where it is dispatched to the level it would like to be dispatched at the VIC price."

By making these comments, Dr Biggar is acknowledging that Murray generation offers affect the Victorian price and hence the incentive to over produce is tempered by receiving lower VIC Spot prices.

What this reveals is that the impact of the Southern Generators proposal is likely to be a reduction in competition between Murray generation and generation in the Victorian/South Australian regions. The impact of this would be a large (uncompetitive) increase in Victorian pool prices, rather than a reduction in prices elsewhere in the other NEM regions.

As stated earlier, the Southern Generator's proposal actually provides strong incentives to either:

- (1) maximise full Murray output; or
- (2) to constrain Murray output to less than approximately 250MWs.

Neither of these incentives is consistent with concept that Murray generation offers will reflect its opportunity cost.

Finally, we consider that the point made by the Southern Generators in the assertion above as being over-simplistic. It suggests that there are no benefits, only costs, from the lower efficiency of price signals within a region. The submission by Origin takes a more balanced approach, recognising that this slight loss of dispatch efficiency is balanced by a reduction in risk and gains in trade, and stating:

"Reorientation would mean that Murray and Victorian generators observe the same price signal and thus all have the same capacity to respond to that price signal.....There is a partial mismatch between dispatch and pricing but it is not substantively different to that affecting other generators subject to a regional price. Reorientation is consistent with the principles of

² As quoted by the Southern Generators in their submission to the Re-orientation proposal on page 6.

regional market design where generators generally do not receive the price at their [local] node."

Assertion 3 - Instability in dispatch

The Southern Generators state that Re-orientation would result in instability in dispatch. Snowy Hydro believes this is an incorrect assertion on the following basis:

- There is no evidence of instability in dispatch with the existing operational practice of reorientation for the southern flow direction through the Snowy region;
- Instability in dispatch shouldn't occur for northerly flows as:
 - NEMMCo can leave re-orientated constraints in place for a reasonable period following introduction of the re-orientated constraints under a high northerly flow/high NSW price scenario given that these constraints will have no material impact if Murray to Tumut transmission becomes unconstrained. Hence the impact of NEMMCO's exercise of judgement is also immaterial. This mitigates the risk of negative residues when it is uncertain when the Murray to Tumut constraint may bind.
 - In any case there are a limited number of hours where the Murray to Tumut constraint binds and hence the limited need to use re-orientated constraints.

Assertion 4 - Inter-regional trade is reduced

This is simply wrong. Under the Re-orientation proposal there is no clamping or restriction on interconnector flow from Vic to Snowy. Under the Re-orientation proposal the Vic/Snowy price essentially equalises and this does not impede inter-regional trade. The Snowy to NSW SRA units are fully effective as hedging tools as the SRAs on this interconnector remains whole. Under the Re-orientation proposal Murray generation has no unique or special incentive to over produce (ie. its MWs affect Vic price on 1:1 basis in the same way as Loy Lang's MWs affect the Vic price). Therefore Snowy Hydro believes with the Re-orientation proposal full inter-regional trade is possible.

Snowy Hydro recognises that the current arrangements (clamping) may create difficulties for Southern Generators seeking to hedge against price separation between Victoria and New South Wales. However, the Southern Generators proposal would simply transfer that difficulty and risk to Snowy Hydro. The Re-orientation proposal reduces risk for all parties, and maximises the potential for interregional trade. Again, these points are well made in Origin Energy's submission.

<u>Assertion 5</u> – The Southern Generators state, "For every 1 MW increase in Murray output, the flow from Victoria into NSW must reduce by 1.33MW".

This statement is wrong. Flow may increase across the Murray to Tumut / Wodonga to Jindera cut-set only, but flow into NSW may remain unchanged. This is an important observation as Snowy Hydro has consistently demonstrated flows into NSW do not increase at times of high northerly flows and high NSW prices.

Likely Impact of Incorrect Assertions

It is worth noting that the likely commercial incentive produced by the Southern Generators proposal (dramatic withholding of Murray generation by up to 1250 MWs, see section 'Assertion 1' above) results in a significant reduction in Snowy Hydro's ability to contract in both Victoria and NSW. This, combined with the fact that the Southern Generators proposal does not in practice result in higher flows into NSW at times of high NSW price (refer to 'Assertion 5' above) will have dramatic price effects in both Victoria and NSW.

We have highlighted in our Section 95 submission to the Re-orientation proposal that in the short term the price in NSW will not reduce as there can be no additional flows into New South Wales at times of high NSW price. However in the medium term, due to reduced ability to manage inter-regional price risks, Snowy Hydro will be forced to reduce contract exposures in both Victoria and NSW. The impact of this likely outcome to the NSW region is shown on page 80 of the Draft Determination to the Southern Generator's proposal by the difference in price outcomes between scenarios 7,9 and scenarios 14,15. The only difference between these two sets of scenarios is a 10% reduction in Snowy Hydro contracts in NSW. With this difference the price in NSW increases up to \$9/MWh! If the Southern Generators proposal goes ahead Snowy Hydro believes that this is indicative of the likely price outcomes that would occur as Snowy Hydro would be forced to reduce contract exposure in NSW.

Conclusion

Snowy Hydro concludes that a number of incorrect assertions have been made by the Southern Generators and Westpac. We have explained in the points above why we believe these assertions are incorrect. In short:

- The Southern Generators proposal will <u>not</u> create incentives for Murray generation to be
 offered in way in which its opportunity cost is revealed. Re-orientation performs much better in
 this regard;
- Under the Re-orientation proposal, the incentive on Murray generation to over produce <u>is</u> governed by the settlement price it receives;
- The Re-orientation proposal will <u>not</u> result in any material instability in dispatch;
- Re-orientation will <u>increase</u> the opportunity for inter-regional trade for all participants (and not reduce it);
- The Southern Generators proposal will <u>not</u> increase flows into NSW (at times of high northerly flows and high NSW price) hence in the short term the Spot price in NSW would not decrease; and
- Under the Southern Generators proposal, in the medium term due to Snowy Hydro's reduced ability to manage inter-regional price risks, Snowy Hydro will be forced to reduce contract exposures in both Victoria and NSW. The price impacts of these effects are demonstrated in the AEMC's modelling accompanying the Southern Generator's Rule draft determination.

Snowy Hydro appreciates the opportunity to comment on the AEMC's draft determination of the Southern Generators Rule change proposal. To discuss this submission further, I can be contacted on (02) 9278 1885.

Yours sincerely,

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