22 May 2009

Your ref. No.: ERC 0082/2

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

By email: submissions@aemc.gov.au

Dear John

Causer Pays for Ancillary Services to Control the Tasmanian Frequency Rule Change Proposal

I refer to Hydro Tasmania's supplementary submission on the above Rule change proposal dated 13 May 2009. In the submission, Hydro Tasmania proposes amendments to the original Rule change to address concerns raised in the first round of submissions, including implementation concerns raised by NEMMCO.

Following discussions between NEMMCO and Hydro Tasmania, NEMMCO considers a simplified implementation would be appropriate if clause 5 was amended to require calculation of the Additional Requirement based on a restricted set of contributors (Basslink trip if FCSPS is in service, trip of the largest unit discounted by its own inertia or trip of the generating unit with the largest inertia in Tasmania) and applied to the raise 6-second FCAS only. For the AEMC's information, an amended description of the process, which does not require an additional NEMDE run, is attached. NEMMCO's issue with a settlement anomaly was also discussed and it was clarified that the costs would be shared pro-rata by capacity. In its most recent submission, Hydro Tasmania has revised the text of the proposed Rule to support the outcome of these discussions.

NEMMCO has not reviewed or changed its position on other issues raised in our first-round submission concerning the runway pricing, identifying the 'causer', grandfathering arrangements or barriers to entry in light of our discussions with Hydro Tasmania.

NEMMCO

If you wish to discuss any of the matters identified please do not hesitate to contact John Wormald on (03) 9486 8769.

Yours sincerely

Murray Chapman
Acting General Manager Market Operations

ATTACHMENT

Causer Pays Rule change - Proposal for determining FCAS costs

The following is a brief description of the process NEMMCO would use to determine the causer pays cost for ancillary services to control the Tasmanian frequency based on Hydro Tasmania's proposal:

1. Establish constraint equations to determine the Raise 6 FCAS requirement for **Basslink trip** assuming the FCSPS is in service for the current and new frequency operating standards. The equations for the current frequency standards already exist. The equations for the new frequency operating standards will need to be determined in any case. However, any change to the FCSPS or frequency standards in future will require both equations to be updated. Therefore this approach requires the upkeep of an additional constraint equation compared to the situation where there is no causer pays process.

2. Create two entries in the XDFCAS program to determine the Raise 6 FCAS requirement for the trip of the **largest generating unit** under the current and new Tasmanian frequency operating standards. XDFCAS is the computer program NEMMCO uses to determine FCAS requirements in Tasmania for all contingencies other than the trip of Basslink. (The Basslink trip contingency is not covered due to the non-linearity of the FCAS requirement resulting from the effect of the FCSPS scheme.) This requires an additional entry to be created in XDFCAS compared to the situation where there is no causer pays process.

3. Create two entries in the XDFCAS program to determine the Raise 6 FCAS requirement for the trip of the generating unit with **largest inertia** under the current and new Tasmanian frequency operating standards. This requires an additional entry to be created in XDFCAS compared to the situation where there is no causer pays process.

4. Develop a process to calculate the right hand side of the **Basslink trip** Raise 6 FCAS equation for both frequency operating standards, for each dispatch interval. If the right hand side value for either equation is less than zero, set the value to zero.

5. Subtract the Raise 6 FCAS value calculated for the current frequency operating standard from the value determined using the new frequency operating standard.

6. Obtain the Raise 6 FCAS requirement from XDFCAS for the trip of the **largest generating unit** for both frequency standards, for each dispatch interval and set to zero if the value is less than zero.

7. Subtract the Raise 6 FCAS value calculated for the current frequency operating standard from the value determined using the new frequency operating standard.

8. Obtain the Raise 6 FCAS requirement from XDFCAS for the trip of the generating unit with the **largest inertia** for both frequency standards, for each dispatch interval and set to zero if the value is less than zero.

9. Subtract the Raise 6 FCAS value calculated for the current frequency operating standard from the value determined using the new frequency operating standard.

10. Determine the largest value from steps 5, 7 and 9 and multiply by the Tasmanian Raise 6 FCAS price for the particular dispatch interval.

11. The value determined in step 10 is deemed to be the Additional Cost.

The process outlined above does not require an additional run of NEMDE. However, it makes no allowance for whether the FCAS required is sourced locally in Tasmania or from the mainland. Furthermore, the mainland Raise 6 FCAS requirement is normally much larger than that of the Tasmanian region. When Basslink is able to make mainland Raise 6 FCAS available to the Tasmanian region it could reduce or eliminate the effective Tasmanian requirement regardless of which frequency standard is applied.

The creation of additional entries in XDFCAS would be a minor task. The upkeep of two Raise 6 FCAS equations for the Basslink trip contingency would only create additional constraint work if the FCSPS or Tasmanian frequency standards changed. Should either of these occur it is estimated that an additional man-day of work would be required above that needed if the causer pays process was not in place. A further set of Basslink trip Raise 6 constraint equations would be required if the loss-of-link event resulting from a DC line fault on Basslink were to be declared non-credible other than during certain atmospheric conditions. This approach is currently being discussed with Transend.

Extra resources would be required to perform the calculation process and determine the Additional Cost and ensure the recovery of all ancillary service settlements costs are allocated correctly. The settlement anomaly raised in NEMMCO's submission has been addressed by amending the proposed Rule such that the capacity of NGCUs determines the allocation.