Hydro Tasmania
the renewable energy business

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Dr John Tamblyn,

Chairman, Australian Energy Market Commission,

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Sydney South NSW 1235

Sent via email to Submissions@AEMC.gov.au

Causer Pays for Ancillary Services to Control the Tasmanian Frequency (ERC0082)

Dear Dr Tamblyn,

Please find attached a supplementary submission on the above rule change proposal.

If you have enquiries on the attached submission, please call the undersigned on 03-62305775.

Yours sincerely,

David Bowker

Manager Regulatory Affairs

Supplementary Submission to AEMC on Causer Pays for Ancillary Services to Control the Tasmanian Frequency

Introduction

Hydro Tasmania has reviewed the submissions to its proposed rule change and notes that these submissions do bring out some valid concerns which can lead to an improvement in the proposed rule. Hydro Tasmania therefore proposes some amendments to our proposal and provides some further clarity on other issues, which should address many of the concerns. These changes would consequently further improve the benefit to consumers and enhance the manner in which the proposed rule meets the National Electricity Objective.

The principal issues from the submissions which we will discuss in detail below are:

1. There is no problem to solve
2. How did TVPS impact on the Reliability Panel's determination
    - Is this a form of causer pays
3. FCAS Liability
    - Should TVPS pay for FCAS when it is not running
    - New entrants are unable to control their FCAS liability
4. Why should Tasmania have different FCAS recovery to mainland regions
    - Runway pricing has previously been considered by NEMMCO
5. Sunset Date Issues
    - The date of 1 July 2008 which appears in the draft rule is an arbitrary date
    - A further tightening of the frequency standard will make grandfathering very complex
    - Impact on competitive outcomes
6. The NEMMCO processes are very complex and impractical

The following sections address these issues in detail. In some cases, changes to the original proposal are suggested.

1 There is no problem to solve

The following is an extract from the Final Determination of the Reliability Panel into the Tasmania Frequency Operating Standards.

> **4.5 Recovering the costs of the increased FCAS requirements**
> While limiting the contingency size has the effect of significantly lowering the FCAS requirements and the associated costs, compared to tightening the standard without a contingency limit, the proposed changes to the Tasmanian *frequency operating standards* will nevertheless result in a small increase in the FCAS requirements, particularly those for R6. For example, at a Tasmanian demand of 900 MW, an additional 31 MW R6 FCAS is typically required if the lower limit of the single contingency *operational frequency tolerance band* is raised from the current 47.5 Hz to the proposed 48 Hz.
>
> Under the existing mechanisms in the Rules many of the benefits of changing the Tasmanian *frequency operating standards* would be captured by the new higher efficiency generating unit, while the costs of the additional FCAS would be recovered from all generators.
>
> The Panel considers that the following two alternative cost recovery mechanisms could also be explored:
>
> - calculating the cost of the additional FCAS required to meet the tighter Tasmanian *frequency operating standards* and recovering this from the new higher efficiency thermal generating unit; or
> - requiring the higher efficiency thermal generating unit to contract with an amount of additional FCAS that NEMMCO would take into account when procuring sufficient FCAS.

There are two points to be drawn out from this passage. Firstly, there is a conclusion that “”*changes to the Tasmanian frequency operating standards will nevertheless result in a small increase in the FCAS requirements”* and the example is provided of 31MW of additional R6. Whilst we do not dispute the 31MW, the real question is what is the cost of this additional service. It should also be noted that the 31MW represents an increase of greater than 25% which is material. Hydro Tasmania, in its submission, estimated the **cost** of providing this service by Hydro Tasmania would be $3.5M pa. This figure has not been disputed by the Reliability Panel. In a Tasmanian context, this is not a small number.

Secondly, the Reliability Panel clearly believes that there is a problem as it makes two suggestions to fix it.

2 How did TVPS impact on the Reliability Panel's determination

Aurora and AETV both make the point that TVPS is not a causer because the panel would have made the same decision even in the absence of TVPS. This may be true but it is inconceivable that the new standard would not have been implemented until a CCGT that did not meet the current standard was ready to be commissioned. Until this time, the additional costs of the tighter standard would have been of no benefit to consumers.

The new standard is consequently being implemented as a direct result of TVPS's presence and their decision to invest in plant that did not meet the standard at the time of investment.

In regards to the application of the causer pays principle, the rule change is based on the fact that, for the above reasons, TVPS is the causer of a tighter standard. As with regulation FCAS causer pays, the process identifies the generators who impact on frequency control (in this case by deviating from energy targets in a direction opposing frequency returning to 50Hz). The tighter standard is only required by TVPS and therefore they are the causer in this case.

3 FCAS Liability

3.1 Should TVPS pay for FCAS when it is not running

Some submissions have noted that the proposed rule change will cause TVPS to be liable for FCAS when it is not running. The standard applies and the additional costs are incurred by the market regardless of whether TVPS is running or not. It is therefore reasonable that the rule should continue to allocate costs during this time.

3.2 New entrants are unable to control their FCAS liability

Aurora have asserted that TVPS is unable to control these additional costs (at the bottom of page 3 of their submission). Any generator is able to manage their FCAS costs. Generators with FCAS capability can provide FCAS whilst all generators have the option to use financial products to hedge their exposure to the market. By choosing to provide this service to the market, a new entrant is able to manage their financial exposure. Under the proposed rule change, AETV are more incentivised to provide FCAS to the market. With the scarcity of supply in Tasmania, this is a good incentive.

TVPS consists of multiple units so that, even when the CCGT is not running, AETV will be able to cover it's exposure by the use of other units if they wish.

4 Why should Tasmania have different FCAS recovery to mainland regions

Some concern has been raised that it was a problem to have a different allocation of FCAS in Tasmania compared with the rest of the NEM. This position is a very theoretical position and the need for differences between Tasmania and the mainland has already been recognised by the Reliability Panel in recommending a different frequency operating standard in Tasmania.

The fact that our proposal is for a participant derogation, which is time limited, supports the view that, over time, these differences should be minimised. Hydro Tasmania recognises the value of a consistent market approach but also believes that well considered transitional measures can provide a better market outcome.

With reference to the various commentaries on runway pricing and NEMMCO's previous consideration of that mechanism, Hydro Tasmania contends that this issue is not a form of runway pricing. In particular, the proposed approach is not the same as previously considered by NEMMCO. The previous discussion on runway pricing centred on the need for the larger generators to "use more of the runway" than smaller generators and hence should pick up a larger proportion of the FCAS costs. If you were to apply the same analogy to tightening of frequency standards it would be like shortening the runway (in this case by 20%). This has the effect of forcing all existing generators to "apply more braking power" to effectively stop the CCGT's falling off the end of the runway.

5 Sunset Date Issues

5.1 The date of 1 July 2008 which appears in the draft rule is an arbitrary date

Some submissions have questioned the arbitrary nature of the date of 1 July 2008. We have considered this issue and believe that this date could be changed to 18 December 2008. This is the date that the Final Determination of the Reliability Panel was published so it has direct relevance to this issue.

5.2 A further tightening of the frequency standard will make grandfathering very complex

NEMMCO have raised the issue of the complexity of grandfathering if there was an additional tightening of the frequency standard in Tasmania. Hydro Tasmania has considered this issue and agrees that it would introduce an unwarranted level of complexity. The proposed solution to this issue would be to amend the sunset clause to be 15 years or when the standard is further tightened.

5.3 Impact on Competitive Outcomes

Some concerns have been expressed about the impact of imposing costs on subsequent new entrants. The nature of the transitional problem is that when a second CCGT is built, the system management issues become much easier. In order to address this issue and recognising the concerns which have been raised, Hydro Tasmania proposes that the sunset clause should also finish when a new large (greater then 100MW) CCGT is ready for commissioning. This will then remove the barrier to entry for subsequent new entrants.

Roaring Forties have made a submission that proposes that only the first new entrant requiring the tighter standard should be considered as a causer. We believe that this proposal has some merit as it removes a barrier for subsequent new entrants prior to a new large gas plant.

5.4 Summary of Sunset Clause

In the light of the suggestions for the sunset clause, it is proposed that a revised sunset clause would see the derogation continue until the first of:

- 15 years or
- A further material change to the frequency operating standards or
- The commissioning of a baseload station bigger than 100MW in Tasmania

6 The NEMMCO processes are very complex and impractical

Based on our initial but brief discussions with NEMMCO, we structured our proposal to attempt to meet their requirements for a simple implementation. We understand NEMMCO has reservations about additional NEMDE runs to determine actual costs and hence offer the following outline of a mechanism to more accurately reflect our original intent. It was never our intention that this rule would result in additional NEMDE runs. The proposed mechanism could be very similar to the regulation FCAS causer pays process. This process takes the previous period actuals to determine a factor that is then applied to the following period.

The following is a short example which illustrates the principle:

The level of R6 required for the 900MW Tasmanian demand case (referred to by the Reliability Panel in their final determination in section 4.5) would be a 32% increase in requirement or 24% of the new requirement that is directly attributable to the new standard; i.e.

47.5Hz + 144MW contingency = 95.2MW
48Hz + 144MW contingency = 125.7MW

These numbers can be calculated for each dispatch interval simply by using the same inputs with the exception of the frequency threshold[1]. The average of all the period dispatch intervals would then become the causer pays factor to be utilised in the settlement process.

The shortcoming of this approach versus the additional NEMDE run is that the price outcome for the 47.5Hz case is not determined. This would constitute a compromise for simplicity that would work in favour of TVPS. Based on the assumption that a higher requirement would result in a higher price outcome the following is representative of what would occur.

47.5Hz case (95.2MW x $10 per MW = $952 total cost)

48Hz case (125.7MW x $12 per MW = $1508 total cost)

The increase in cost is actually $556 for the new standard.

Using the causer pays factor approach TVPS would be allocated the first 24% of the total cost ($362) with the remaining $1146 being recovered from all generators on the normal energy pro-rating basis.

It is quite clear that there is downside to choosing the simpler approach, and this downside is spread across all generators not just the causers. Hydro Tasmania believes this is an acceptable compromise.

We will continue to work with NEMMCO and keep the AEMC appraised of progress in developing a workable solution.

Summary

The submissions have provided very useful feedback in improving the original Hydro Tasmania proposal. The resultant rule change will be closely aligned to one of the suggestions made by the Reliability Panel in its Frequency Standard Determination.

This rule will introduce market incentives which are in the long term interest of consumers and hence contribute to the National Electricity Objective.

[1] Consequently, Aurora's comments on page 4 of their submission about the multiple variables which contribute to the level of FCAS requirement, whilst entirely accurate, are not relevant as all of those factors remain the same regardless of which standard is applied