



Ref: B/D/17/3864

21 February 2017

Attention: Mr Nathan White  
Markets Executive Officer  
AEMO  
BY EMAIL

Dear Mr White,

### Causer Pays Procedure Consultation

This letter is in response to the consultation paper published December 2016 concerning updating the Causer Pays Procedure.

I take the opportunity to thank you for consulting with CS Energy employees. I was advised that they found it very helpful to discuss the matter with you and Mr Ranatunga.

I hope you find CS Energy's suggestions helpful in your deliberations on the matter. My staff members are available should you wish to discuss the content of this letter.

Yours sincerely

A handwritten signature in black ink, appearing to read "S. Hoult", with a long horizontal stroke extending to the right.

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**1. Do stakeholders agree that calculating factors for local regulation requirements should be done based only on the performance of units within the local requirement area?**

Yes.

**2. Do stakeholders agree that calculating factors for the set of possible region combinations is more appropriate than aggregating factors only when required?**

Please see answer to question 8.

**3. Are there any adverse or unintended consequences associated with the proposed options?**

We provide a new method in answer to question 8.

**4. Are there any viable alternative options for calculating causer pays factors for local regulation requirements?**

Please see the table in response to question 8.

**5. Do stakeholders agree that allowing helpful performance to offset unhelpful performance within a portfolio is appropriate?**

We make the following observations:

There exist strict Rules over who should provide the services for regulating frequency (those enabled under the requirement) and how participants should comply with Dispatch Instructions. The Rules only allow units to deviate from dispatch instructions to regulate frequency if the unit is enabled. It is for this reason that CS Energy, in conjunction with the operator, adjusted its governor control "dead-band" settings at Gladstone Power Station.

It would be appropriate to offset performance if the Rules did not have this strict requirement and instead allowed generators to decide whether or not to follow a dispatch instruction (to regulate frequency or worsen frequency) based on whether the marginal cost of doing so was more or less than the benefit in doing so.

However, opposing the above observation is that it must be remembered that the Residual, due to the inability of metering this volume, receives a benefit of positive performance. If AEMO does not adopt the recommendations outlined in response to question 8, which is to calculate an aggregate metered MPF first and then split this by each participant (rather than a participant MPFs for gen, customer and add these together to calculate a residual), then it would be unreasonable to remove the offsetting of positive performance for metered generators and loads. This is because offsetting is provided to the residual (non-metered load) it should be provided to metered generators and loads.

**6. Do stakeholders agree that positive performance should carry an equal weighting with negative performance during the netting process?**

See above.

**7. Are there any adverse or unintended consequences associated with the proposed options?**

See above.

**8. Are there any viable alternative options for aggregating performance into participant factors?**

In the following table we provide an alternative high level process for aggregating performance into participant factors. Recognising the recommendation is at a high level we offer to work with AEMO to determine whether this alternative is a more efficient allocation of the costs of regulating frequency.

The first step is to calculate the aggregate MPFs for the SCADA metered units (all those not enabled for REG FCAS or enabled yet with negative performance in the 5 minutes) and non-metered elements of the power system. It is important to excluding the enabled for REG with positive 5 min performance from this step.

The second step is to split the SCADA metered value into MPFs.

For Global factors the second step is all that is needed.

For local factors where local requirements apply, e.g. Mainland, QLD or SA , a further step is needed whereby the Participant MPFs should be used to allocate a share the SCADA value, in this example 60, by the performance factors of each unit in that region. In this example the unit MPFs that formed part of step 2 only total 20 and are therefore scaled up by a factor of 3 to calculate local MPFs.

Please note that the residual remains unchanged during this process and used as a proxy for the contribution to the need for regulating services of any global or local requirement. We cannot see any reason why the global residual should be scaled in proportion to the region demand.

Step 1	Aggregate MPFs	Step 2	Global MPFs	Step 3	Local units	Local MPFs
Residual	40	Residual	40			40
All SCADA n()	60	Participant 1	10	Participant 1	5	15
		Participant 2	10	Participant 2	5	15
		Participant 3	20	Participant 3	0	0
		Participant 4	15	Participant 4	10	30
		Participant 5	5	Participant 5	0	0
Total	<u>100</u>		<u>100</u>		20	<u>100</u>

**9. Do stakeholders agree that allowing positive performance to offset negative performance across the sample period is appropriate?**

See above.

**10. Are there any adverse or unintended consequences associated with the proposed options?**

See above.

**11. Are there any alternative options that may be more appropriate for netting performance across the sample period?**

See table in answer to 8.

**12. Do stakeholders feel that real time factors would provide more effective signals than those coming from a longer averaging period?**

The Rules could allow generators to decide whether or not to follow a dispatch instruction (to regulate frequency or worsen frequency) based on whether the marginal cost of doing so was more or less than the benefit in doing so. If the Rules adopted this principle then it would be sensible to



go to both real time procurement (rather than requirements) and real time causer pays factors. We note however that such a suggestion is beyond the scope of this review.

CS Energy supports the provision of data through the MMS to allow assessment of performance of units on a 5 minute basis. It would be helpful to publish 5 minute "factors" for units so that participants can amend behaviour to improve each unit's performance.

**13. How do stakeholders value the certainty of factors published in advance and the ability to average their portfolio performance across a longer period of time, versus the potential increase in accuracy and volatility of moving to shorter sample periods?**

Sample period is arbitrary unless we move to closer real time marginal cost signals.

**14. Do stakeholders believe that a 7 day sample and application period might represent a good compromise between the benefits of long-term and real-time factors?**

No. The sample period is arbitrary. It may be better to retain the existing period, if there is to be one, as factors may be more stable.

**15. Do stakeholders value the 10 day notice period between publishing and applying causer pays factors? Would a longer, shorter or absent notice period be desirable for any reason?**

No comment.

**16. There are other timeframe combinations not listed as options, however AEMO welcomes feedback on whether more appropriate compromises exist between the sample, notice, and application periods.**

No comment.

**17. Are there any adverse or unintended consequences associated with the proposed options?**

No comment.

**18. Do stakeholders agree that a portion of the residual should be recovered from non-metered generation, in accordance with their contributions to this frequency deviation component?**

Yes in principle, however we don't understand how this may be performed if these participants have no SCADA values. In preference these participants should be allocated the Residual as per the recommended calculations in the table provided in response to Question 8 above. As the proposed calculation will more effectively allocate costs to the residual, these non-metered generators may, in time, provide AEMO with data from SCADA or smart meters.

**19. Are there any adverse or unintended consequences associated with the proposed option?**

No.

**20. Are there any alternative options that may be more appropriate for allocating regulation FCAS costs to non-scheduled generation?**

See question 18.

**21. Do participants agree that regulation FCAS costs should be recovered from market customers through the residual demand factor in cases where all participant factors are positive/zero?**

In an ideal world, if there are no deviations from system frequency there should be no cost. However this is not the case and therefore any costs must be recovered. This can be performed as AEMO currently does so.

***22. Are there any adverse or unintended consequences associated with the proposed option?***

No comment.

***23. Are there any alternative options that may be more appropriate for resolving cases where all market participant factors are positive?***

No comment.