Mr Nathan White
Australian Energy Market Operator
Level 22, 530 Collins Street
Melbourne VIC 3000

Lodged via email Nathan.white@aemo.com.au

Friday, 27 January 2017

Dear Mr White,

RE: Causer Pays Procedure Consultation

ENGIE appreciates the opportunity to comment on the Australian Energy Market Operator (AEMO) Causer Pays Procedure Issues Paper (Issues Paper). The Issues Paper identifies ten issues for comment, and ENGIE has responded to each if these items below.

1. **Calculation of causer pays factors when regulation FCAS requirements apply within a local region**

ENGIE agrees with AEMO's assessment that the current approach of using global factors scaled into regional factors when there is a local regulation frequency control ancillary service (FCAS) requirement is not ideal, as it allows the performance of every one of a participant's units to impact the local causer pays factors, even if those units are outside of the local region.

ENGIE notes AEMO's preference for option 2, which would calculate separate factors for participants only on the basis of performance of units within the local requirement area. ENGIE agrees that this approach is an improvement on the current arrangement, noting that it will require significant system changes and increased complexity.

ENGIE is inclined to favour option 3, which is a simplified version of option 2. This option involves causer pays factors being calculated for each of the NEM regions in isolation, and then aggregating and normalising into global factors. ENGIE notes that this approach would remove the ability of participants to trade positive and negative performance across region boundaries, but questions whether portfolio balancing should be continued. if portfolio balancing were to be abolished (see next section), this would no longer be relevant.

2. Ability for positive and negative performance to balance within a portfolio

The current approach of allowing positive and negative performance to balance within a participant's portfolio creates issues when there is a local requirement (as noted in the previous section), and can also create deviations in interconnector flows where participants seek to compensate within their portfolio but across different regions.

ENGIE is inclined towards the view that the causer pays assessment should be applied to each unit's contribution to frequency deviations, and not allow balancing across a portfolio. The current arrangement of averaging out positive and negative performance factors for generating units within a portfolio diminishes the effectiveness of the performance factors incentivising improvements in a generating unit's frequency performance.

As an example, suppose there are two participants each with three units with performance factors as shown below:

	Unit 1	Unit 2	Unit 3	Sum	Normalised
Participant A	+0.8	+0.2	-1.0	0	**0%**
Participant B	+0.1	-0.2	0	-0.1	**100%**

In this example, participant A's unit 3 is clearly the worst performing unit, but it receives no causer pays penalty since it happens to be in a portfolio with two other positive performance units. As a result, 100% of the costs are assigned to the relatively good performing unit 2 of participant B. If the intent of the causer pays methodology is to assign frequency control costs to the generating units that have the largest contribution to the frequency errors, in the above example this objective is not being met.

Portfolio balancing makes the effectiveness the causer pays methodology in incentivising improved generator frequency response subject to the vagaries of participant portfolio make-up. If the frequency performance of a generating unit was considered likely to be a significant driver for a participant to decide to invest in a generating unit, then perhaps it could be argued that the portfolio balancing might be justified. For example, if in the above example, participant A invested in generating unit 1 specifically because it has good frequency performance, and this was done as a means of balancing out its poor performing unit 3, then portfolio balancing might be justified. However, ENGIE does not believe that frequency response is likely to be a significant driver in generating unit investment decisions.

By way of comparison, the energy market dispatch compliance mechanism makes an assessment of each individual unit's compliance, and does not allow aggregation across a portfolio. For example, a participant cannot ask for a relaxed approach to it being under target on one of its generating units, on the basis that it has another unit within its portfolio that is over target. ENGIE suggest that this same principle should apply to regulation FCAS causer pays.

If portfolio balancing were no longer allowed, then the global / regional issue would become easier to manage as discussed above.

As a possible alternative for consideration, ENGIE notes that when the current regulation FCAS enablement arrangements were conceived in 1999, the recommendation was that this be a transitional step, and that a more

robust approach would not require any regulation FCAS service to be enabled at all[1]. The alternative approach would make payments to those units that had a positive causer pays factor, and recover the money from the units that had a negative factor. This would overcome the current problem with the causer pays factors being historical and therefore not an accurate real time assessment of the need for frequency control. ENGIE suggests that if AEMO are inclined to move towards real time assessment and application of causer pays factors, then it might be more appropriate to re-consider the proposals made back in 1999.

3. Ability for positive and negative performance to balance across the sample period

Although ENGIE has argued above that portfolio balancing should not be continued, ENGIE agrees that balancing across the sample period is appropriate. This allows individual units to have their performance factor representative of the average performance of the unit over the course of the whole sample period, and not being a snapshot taken at a particular moment in time.

4. The most appropriate sample period, notice period, and application period

ENGIE are inclined to agree with AEMO's preferred approach of a 7-day sample period and reduced notice period. Noting that the 7-day period may be considered too short to allow for periods of bad SCADA data, ENGIE suggests an alternative approach of a sample period of the previous 14 days calculated each week. This would be a 14-day sample period that steps forward by 7 days every week. This would provide more certainty that there will be sufficient valid SCADA data available, and retain the currency of more recent data.

5. The treatment of non-scheduled generation

ENGIE agrees with AEMO's proposal to seek a rule change that would enable non-metered (non-scheduled) generators to be allocated a share of the residual factor.

6. Resolving cases where all factors are positive

ENGIE agrees that AEMO should ensure that its causer pays documentation adequately accounts for cases where all of the calculated causer pays factors are greater than or equal to zero.

7. Treatment of facilities with changing registration status during the sample period

ENGIE agrees with the AEMO proposal that newly registered units should only have causer pays contributions calculated commencing from the time that the unit is registered.

8. Producing factors when significant periods of input data are deemed unreliable or inapplicable

ENGIE agrees with the proposal that if the less than 20% of dispatch intervals in the sample period are viable due to data quality issues, then the previous sample period factors should be applied.

9. The appropriate form and granularity of published causer pays datasets

ENGIE supports the proposal to publish the 5-minute causer pays contributions for each unit in parallel with the final factors. ENGIE agrees with the statement by AEMO that the four second data files are unwieldy and that the proposed 5-minute contributions will be useful to participants in reconciling their causer pays factors. ENGIE does

[1] See section 3; Evaluation of Options for an Ancillary Services Market for the Australian Electricity Industry, Intelligent Energy Systems Pty Ltd; August 1999. Available at http://downloads.iesys.com/Insider/Insider%20022/AS%20Stage1%20Report%20Final%20-%20IES.pdf

ask however that AEMO continues to publish the four second data files so that participants are still able to drill-down to the raw detail when necessary.

10. Consolidation and clean-up of causer pays documentation

ENGIE welcomes AEMOs proposal to consolidate and clarify the current causer pays documentation. ENGIE suggests that AEMO consult with participants as they develop the new draft documentation to ensure that the information is understood and correctly interpreted.

As a concluding comment, ENGIE notes that much of the recent concern regarding causer pays for FCAS centres on the realisation that extremely high FCAS costs can arise, particularly when there is a local requirement within a region or sub-region. Rather than introduce complex new causer pays methodologies, which in turn introduce new risks of their own, ENGIE suggests an alternative approach for consideration would be to reduce the market price cap (MPC) and/or the cumulative price threshold (CPT) for regulating FCAS.

It is questionable whether the MPC / CPT for regulating FCAS need to be maintained at the same level as that for the energy market. Whereas the energy market MPC / CPT are fundamental to ensuring appropriate investment signals in the energy only market, it is not so clear that the regulating FCAS MPC / CPT are similarly needed for investment signals. Another way of considering the MPC in the energy market is that when an energy supply shortfall exists and the market is no longer able to clear, the price should reflect the value of customer reliability, which is a very high level. The consequence of a shortfall of regulating FCAS however, is not as dire from a customer's point of view. A shortfall of regulating FCAS might mean that the frequency control is less effective than it should be, but most customers would not be aware of this at all.

ENGIE suggests that consideration could be given to whether the regulating FCAS MPC / CPT could be reduced to such a level that in the event of a supply shortfall of regulating FCAS, the price would not be so high that it represents a significant prudential risk for exposed participants. This would reduce the need to introduce complex and risky new causer pays methodologies into the NEM.

ENGIE trusts that the comments provided in this response are of assistance to the AEMO in its deliberations. Should you wish to discuss any aspects of this submission, please do not hesitate to contact me on, telephone, 03 9617 8331.

Yours sincerely,

Chris Deague
Wholesale Regulations Manager