

MEMORANDUM

DATE:	21 MARCH 2016
SUBJECT:	FCAS DISPUTE RESETTLEMENT PROPOSAL TREATMENT OF NON-SCHEDULED GENERATION

1. PURPOSE

To note and explain the treatment of non-scheduled generation in the calculation of approximate 'SA-specific' causer pays factors under a resettlement proposal to resolve the current dispute between Origin and AEMO under the National Electricity Rules, as discussed at a meeting of affected participant representatives on 15 March 2016.

2. BACKGROUND

AEMO has calculated an approximation of the causer pays factors that might apply if only appropriately metered¹ generation and load within the SA region were taken into account. AEMO applied these factors, together with a derived residual factor, to determine the estimated resettlement amount that would be payable by or to each SA Market Participant if the current resettlement proposal were agreed. These amounts have been made available to the affected participants.

The current NEM causer pays factor methodology cannot be applied in full to an individual region calculation. It was therefore necessary to make some adjustments and assumptions. At the 15 March meeting, AEMO gave a presentation on the methodology it has used to derive approximate SA-specific factors.

A question was raised at the meeting about the impact of AEMO having aggregated the factors for market scheduled/semi-scheduled and non-scheduled generation. This memorandum responds to that question and makes a number of additional observations about the treatment of non-scheduled generation in the methodology.

3. AGGREGATION

AEMO confirms that aggregating the contributions of market scheduled or semi-scheduled with non-scheduled generation, of itself, has no impact on the resulting causer pays factors.

The attached spreadsheet shows the calculations (with and without aggregation).

4. LOAD FORECAST CONTRIBUTION OF NON-SCHEDULED GENERATION

In the current (NEM-wide) causer pays factor calculation, the contribution of metered non-scheduled generation is combined with a share of the forecast error to determine a raw factor for the non-scheduled unit.²

The allocation of the forecast error between metered market non-scheduled generation and non-metered load and generation (the residual) is determined by reference to 'within 5 minute' factors. The within 5-minute factors represent the nonlinear nature of the demand change from the start to the end of each dispatch interval.

¹ 4-second SCADA metering (generation may be scheduled, semi-scheduled or non-scheduled)

² Scheduled and semi-scheduled generation is measured on its performance relative to a dispatch target and therefore does not receive an allocation of forecast error.

The forecast error and the within 5-minute factors are aggregated for the mainland regions as a whole and separately for Tasmania.

At a regional level, the calculations for determining the within 5-minute factors simply do not work, because a number of issues arise (including interconnector performance and the impact of weighted averaging) that are not relevant when the regional factors are aggregated to a whole-of-mainland figure.

In this case the disaggregated SA regional within 5-minute factor works out at zero. We know this does not reflect reality. If we apply the NEM methodology it means that although the contribution of metered non-scheduled generation was very small, those non-scheduled units would be allocated the entire forecast error, with none allocated to the residual.

AEMO therefore disregarded the forecast error in determining the SA-specific MPFs for metered non-scheduled generating units. Accordingly, the proposed resettlement amounts provided to Market Participants do not reflect any share of forecast error other than in the residual factor.

As an alternative approach – a notional share of the forecast error could be allocated to metered non-scheduled units by, for example, scaling the within 5-minute factors and forecast error based on a demand ratio.

The attached spreadsheet demonstrates approximate causer pays factors for ‘Method 1’ – as already communicated to SA Market Participants - and ‘Method 2’ – including a share of the forecast error for metered non-scheduled units on the basis outlined above.

5. OUTCOMES

The alternative ‘Method 2’ would give metered non-scheduled generating units in SA a higher causer pays factor than under the original resettlement proposal. In aggregate, those increases are not significant. They would be offset by a marginal reduction in causer pays factors for scheduled and semi-scheduled units and the residual factor.

AEMO does not propose to recalculate the settlement impact of Method 2. This information is provided to participants to assist their understanding of the original resettlement methodology, and the issues involved in deriving region-specific factors.