

MEETING OUTCOMES – WHOLESALE SETTLEMENTS FORUM

MEETING: WAMRP Wholesale Settlements Forum 2

DATE: Wednesday, 23 November 2016

TIME: 10.00 am – 1.00 pm

LOCATION: AEMO Boardroom – Level 17, 197 St Georges Terrace, Perth

ATTENDEES:

NAME	COMPANY
Fiona Wiseman	Alinta
Siyang You	Blair Fox
Ignatius Chin	Bluewaters
Steve Gould	Community Electricity
Wendy Ng	ERM Power
Iulian Sirbu	Kleenheat
Alexandra Lanyon	PUO
Jenny Laidlaw	PUO
Laura Koziol	PUO
Brad Huppatz	Synergy
Basilisa Choi	AEMO
Chris Muffett	AEMO
Celestino Velasco	AEMO
Dimi Botha	AEMO
Greg Ruthven	AEMO
Jacquie Miller	AEMO
Jayesh Halai	AEMO
Kerri Ball	AEMO
Mark Katsikandarakis	AEMO
Michael Sanders	AEMO
Mike Hales	AEMO
Phil Hayes	AEMO
Ruth Guest	AEMO

1. Welcome

2. Recap on actions from previous meeting

Causer Pays cost allocation approach for FCAS regulation was raised in Forum No.1 and will be discussed in Forum No. 2. Stakeholders also requested more information on the runway methodology for recovery of FCAS contingency raise costs covered in the second Forum.

3. Presentations

Causer Pays

 Question – How is a generator's performance measured for the purpose of the causer pays calculation?



Answer – Performance in the sense of regulation means whether or not a facility is deviating from what its expected load or output is relative to the deviation of the frequency of the system.

- Question For a retailer who serves large industrial loads with SCADA metering and other smaller loads, can the performance of one offset the other?
 - Answer Only to the extent where the load has SCADA monitoring that permits the frequency performance of the load to be assessed.
- Question How do generators manage their cost exposure?
 - Answer A generator can qualify and be dispatched to provide the FCAS regulation service, in which case they are treated differently in the causer pays calculation. Alternatively the generator could use a range of different ways in which to manage their frequency performance. AEMO produces a data set of information to help generators understand the characteristics of their particular facilities.
- Question Just clarifying the contribution factor applies for the half hour but prices are still determined in 5 minutes?
 - Answer Yes, a single contribution factor will be applied to all 5 minute dispatch intervals without the half hour trading interval. The calculation of FCAS regulation recovery is done on a 5 minute basis, as the ancillary services price and constraint outcomes can be different in each dispatch interval.
- Question For semi-scheduled generating units, what dispatch target is used for the assessment of adherence to target?
 - Answer Semi-scheduled generating units are issued a dispatch target based on the wind forecast determined by AEMO and are assessed on their output relative to that target.
- Question Most generators in the WEM have governors enabled, which should respond to frequency changes. What does this mean in terms of causer pays?
 - Answer Deviation in its own right doesn't determine performance, performance is based on both the deviation against the expected output trajectory, and a frequency indicator (whether the system required a raise or lower regulation response in order to achieve the target frequency)
- Factor Rearrangement This process is necessary to correctly assign factors to nonscheduled facilities with SCADA monitoring. Note that non-scheduled generators that do not have SCADA monitoring currently do not receive any proportion of regulation costs.
- Question Is it possible to provide an indication of \$/MWh costs that may be faced by a particular facility type?
 - Answer Information is published on the AEMO website that could be used to estimate indicative costs of the different FCAS services for the NEM.

http://www.aemo.com.au/Electricity/National-Electricity-Market-NEM/Data/Ancillary-Services/Ancillary-Services-Payments-and-Recovery

While these costs may not be directly applicable to the WEM, stakeholders can consider contribution factors applicable in the NEM for corresponding facility types.

Two factors in terms of what costs a generator may incur. 1. Overall cost of regulation, for which there will be historical WEM information. 2. What proportion of frequency deviation do wind farms typically incur, for which NEM contribution factors may provide an indication.

Question – How can a participant validate contribution factors calculated by AEMO?



Answer – Following each four week cycle in the NEM, AEMO publishes all the data required for a participant to reproduce the calculation, including underlying SCADA data for every facility. AEMO is proposing to do the same for the WEM.

 Question – What criteria does AEMO expect to use when registering facilities to provide FCAS regulation?

Answer – AEMO publishes the Market Ancillary Service Specification in the NEM, which we are proposing to adapt for the WEM. The technical criteria may vary for the WEM based on market differences, including the frequency operating standard to apply in the SWIS.

- Question How much do the contribution factors vary from month to month?
 - Answer Can be quite significant, with variability tending to relate to how the generator is used over a particular period. If further information is required, we can put stakeholders in contact with the appropriate AEMO team who can assist in understanding month to month variability.
- Question If a peaking generator does not operate for a four week period, will it get a zero contribution factor and will that apply to the next four week period?

Answer – Yes. Conversely, if a generator has a non-zero contribution factor then it will apply for the coming four-week period irrespective of whether the generator operates or not. This is a consequence of the calculation and publication timeframes in the causer pays process and is a reason why many participants in the NEM have qualified and seek to be enabled for the FCAS regulation service to hedge their potential exposure.

Full Runway Pricing

• Question – Will the runway calculation be performed for every half hour?

Answer – If the calculation is based on SCADA readings then it could be performed every 5 minutes. However, the source of the calculation input is not yet decided, with alternative options including dispatch targets and interval meter data. 30 minute allocation may be more appropriate if meter data is to be used for the calculation (given that 5 minute meter data is not available).

- The amount of contingency raise and lower service in the NEM is set by the largest credible contingency, adjusted for load relief.
- Question Why are we considering five minutes?
 - Answer The cost of FCAS contingency raise can vary every five minutes, so this would allow more granular cost allocation. The use of SCADA in the calculation is being considered to capture some of the 'behind-the-fence' generators who aren't contributing at present.
- AEMO is continuing to work with the PUO to support design decisions in some specific aspects that require clarification, particularly the input value for the calculation.

Approach to Registration

- AEMO advised that discussions are still on-going regarding registration. Presentation provides an idea of what registration processes might look like from a settlement perspective.
- Correction to slides The term ancillary service provider can describe either a market generator that provides ancillary services from a generating unit or a market customer that provides ancillary services from an ancillary service load.



- The relationship that a non-market ancillary service (NMAS) provider may have with AEMO is purely contractual and may not be related to the market.
- Question What is RCTI?

Answer – RCTI = Recipient Created Tax Invoice. At present AEMO requires separate RCTI agreements for WEM and NEM, but is currently looking at the feasibility of a single agreement.

- Question When we had to sign new RCTI's in November was that not the new format?
 Answer It was the existing IMO format but rebadged based on the transition from IMO to AEMO.
- Question What is CDEII?

Answer – Carbon Dioxide Equivalent Intensity Index. AEMO's understanding is that will not be a mandated requirement in the WEM but it is built into AEMO's systems so would be available at no cost. AEMO considers this may have some benefits to the industry and it would be relatively straight forward to produce for the WEM. AEMO could use either participant-provided emissions factors or AEMO could source from agencies such as the Clean Energy Regulator or estimate based on fuel and technology type.

- Question Do all participants in the WEM use Austraclear? Or use an agent?
 - Answer In the case of the NEM, Austraclear is invaluable as a third party service that allows movement of money within 20 minutes into AEMO's bank account. It's difficult to envisage how AEMO would manage the market settlement processes in the current timelines without the Austraclear service.
- Question Can AEMO please consider payment arrangements that do not involve Austraclear, due to the high costs of Austraclear to smaller participants?

ACTION: AEMO to consider alternatives to Austraclear that may be more suitable for smaller participants.

- Question Will security deposits continue to be registered in the PPSR?
 - Answer AEMO is looking at the way security deposits are held in the Personal Property Securities Register (PPSR) currently to see if that is the best way to continue going forward noting the current administrative burden of the associated deed documentation.
- The ability to provide cash as well as guarantees to meet credit limit requirements is assumed to continue.
- AEMO is also looking at having 'operational' security deposits rather than prepayments to allow participants to manage their trading limit on a day to day basis.

Market Fees

- Question What is the Participant Compensation Fund?
 - Answer A Mutual insurance policy that exists in the NEM for scheduled generators that are impacted by scheduling errors. Rather than go back and attempt to try and fix the dispatch process, the NEM has a mechanism where participants can make a claim and receive compensation from the Participant Compensation Fund. For example, there are claims being assessed at the moment related to wind farms that have effectively been dispatched at a reduced target due to an issue in the wind forecast.
- Question How is that different to the dispute process for an invoice?



Answer – It is a different mechanism under the National Electricity Rules. If a participant in the NEM disputes a calculation its invoice and the dispute was upheld, then AEMO would recalculate the settlement amount. However if the dispute relates to an error in the dispatch process AEMO does not perform a 'what if' assessment to analyse what would have occurred if no scheduling error occurred. The Participant Compensation Fund is set aside to pay out the claimant in this case.

 Question – Has there been any thought if ancillary services providers are going to pay participant fees?

Answer – AEMO has a consultation process under way to consider the impact power of choice on our fees in particular retail fees because in the NEM from next year there is going to be a metering coordinator and the potential for Embedded Network Manager. Consultation is looking at whether those categories should pay fees. AEMO has not progressed if other categories of participants should pay fees. This is likely to be considered in the NEM when the fee methodology is reviewed in 2021.

• Question – Who determines the NEM fee structure?

Answer – NEM fee structure determined by AEMO. AEMO is obliged to consult with industry on the fee structure. AEMO is 40% owned by the industry participants who closely scrutinise AEMO's fees. Fee rates are benchmarked with the expectation that AEMO will keep these rates as low as possible.

WEM fees would be kept separate as the structure and approval processes are set out in the WEM rules.

If you own a generator and you deregister you immediately stop paying fees.

- Question What's the rationale for NEM generator fees containing a capacity component?
 - Answer The principle is to charge generators a fee based on their level of involvement in the NEM. AEMO incurs costs in providing services to peaking generators that are greater than would be charged using a purely energy-based fee, so has ended up with a hybrid approach of using both capacity and energy.
- Question How are WEM market fees calculated at the moment?
 - Answer WEM market fees are currently based on MW-hours and are split 50-50 between generators and customers. By contrast, the split between customers and generators in the NEM is not fixed and is left to AEMO's discretion. AEMO has developed a methodology of proportioning between customers and generators, based on analysis of all of AEMO's various functions (settlements, prudentials, etc.).
- Question What costs are included in the General Fees (unallocated) in the NEM?
 Answer Overheads of AEMO, legal costs, finance costs that aren't directly associated with AEMO's market functions.

4. Next meeting

Settlements Forum scheduled for 14 December 2016. AEMO seeks feedback on particular topics that stakeholders would like to see covered in the Settlements Forums.