

DEMAND RESPONSE MECHANISM AND ANCILLARY SERVICES UNBUNDLING 2016 DETERMINATION: AEMO SUBMISSION

1. SUMMARY

AEMO welcomes the opportunity to provide a submission on the AEMC's draft rule determination on National Electricity Amendment (Demand Response Mechanism and Ancillary Services Unbundling) Rule 2016 ("the Proposed Rule"). It is understood that the AEMC is seeking submissions from stakeholders in response to recommendations made in the AEMC's draft rule determination. This submission focuses on aspects of classification registration, systems capability and transitional arrangements.

AEMO is generally supportive of this rule change and would be in a position to implement the rule in accordance with the proposed timing. Below we outline our view on the implementation of the Proposed Rule given existing NEM procedures noting the following issues:

- Appropriate transitional arrangements will need to be put into place to allow AEMO to establish appropriate registration fees without reopening AEMO's current fee structure determination.
- Given the broad range of participants that could potentially apply for registration and the technical requirements of ancillary service provision, the eligibility for registration should be based on a current capability to provide the requisite service. To that end, AEMO considers that the generator eligibility criteria are a more appropriate model for registration of new market ancillary service providers.
- We note that market ancillary service providers would be ineligible to offer regulation ancillary services under the current market ancillary services specification, and only be eligible for contingency ancillary services.
- For clarification, our interpretation of the Proposed Rule is that once registered, a MASP must seek AEMO approval to designate each market load to provide ancillary services. Any additional load acquired or aggregated by the MASP will then require the further approval of AEMO.

2. SUBMISSION

2.1 New Classification

The rule proposes to establish a new class of market participant – a MASP (under Clause 2.3AA of the Proposed Rule) that would be able to provide market ancillary services ("MAS") from one or more market loads connected to a transmission or distribution system.

This requires establishment of a new set of registration procedures and guidelines for registering new MASP participants, which we envision would be based upon existing registration documentation for existing classes of market participants. Registration would include the setup of a new Dispatchable Unit Identifier ("DUID") for every MASP, upon which centralised dispatch would be based. Importantly we note that the Proposed Rule preserves the ability of existing Market Customers to provide MAS, and thus would expect that such Market Customers will not need to re-register under the new class, except where it seeks to compete for other market loads that are not existing customers.

Given the technical and equipment requirements of market ancillary service provision, it is important that for a MASP to be eligible to register, that it is able to positively demonstrate a current capability to provide the requisite service. A MASP should be able to i) identify units of load under its ownership, operation or control, ii) demonstrate that the load has the requisite assets and equipment, and iii) that the load can meet relevant performance standards and specifications, in each case to AEMO's satisfaction. To that end, AEMO considers that the generator eligibility criteria, Section 2.2.1(e) of the National Electricity Rules (the "Rules") rather than the customer eligibility criteria (Section 2.3.1 (b) of the Rules upon which Proposed Rule 2.3AA is based) are a more appropriate model in setting eligibility criteria for the MASP classification.

Registration fees will need to be established. Changes to current systems will be also required to enable the new registration and to allow the classification to flow through into dispatch and settlement systems. As such, we recommend that appropriate transitional arrangements as suggested in Section 2.3 are put into place.

Similar to existing providers of MAS, we envision that the new MASP participants will not have prudential requirements.

2.2 Systems Capability

The draft rule determination requires that a MASP have all appropriate systems in place, be able to deliver the FCAS in accordance with the market ancillary services specifications (“MASS”) and must comply with the central dispatch process.

Existing systems procedures already envision and cater to the provision of aggregation of generating units or Market Customers for the purposes of providing MAS. As such we do not require modifications to the existing MASS. Importantly we note that the MASS (under section 1.3) does not accommodate aggregated dispatch for the purposes of *regulating raise service* or *regulating lower service*. As such, a MASP (or indeed Market Customers and Small Generation Aggregators) is currently ineligible to offer FCAS regulation services.

For clarification, our interpretation of the Proposed Rule (under Section 2.3.5) is that once registered, a MASP with the approval of AEMO to use a designated market load to provide ancillary services. Any additional load acquired or aggregated by the MASP will then require the further approval of AEMO. In essence, a MASP is prohibited from providing MAS through load that has not been specifically approved by AEMO.

From a technical perspective, FCAS is not currently able to be provided across regions, and therefore bid and offer aggregation guidelines (under Clause 3.8.3) should require that a MASP seeking to aggregate multiple market loads to treat them as one ancillary service load must ensure all such loads are located within the same NEM region.

Furthermore, we note the requirements of the MASS in relation to equipment requirements (MASS Section 1.3, Rule 3.11.7(a)):

- the equipment required to monitor and record aggregated responses of ancillary service loads or ancillary service generating units must have the following characteristics:
 - I. The power flow representing the amount of generation or load of each constituent plant of the aggregated ancillary service generating unit or load must be measured at or close to each of the relevant connection points and summed to calculate the aggregated generation amount or aggregated load amount.
 - II. The local frequency must be measured at or close to each of the relevant connection points or, if otherwise agreed with AEMO, an alternative measurement may be provided that closely represents the frequency of each aggregated ancillary service load or ancillary service generating unit.
 - III. Subject to clause 1.3 (iv), the measurements of power flow and local frequency of aggregated ancillary service loads or ancillary service generating units must be made at an interval specified under clause 2.5, 3.5 and 4.5. Sufficient information should be provided to compare the local frequency and power flow data in a common time scale.
 - IV. If agreed with AEMO, where a switching controller is used, the measurement of power flow representing the aggregated generation amount or aggregated load amount may be made at intervals of up to 4 seconds provided that another measurement of power flow at an interval of 50 milliseconds or less is provided sufficient to determine the timing of the market ancillary service provision relative to local frequency.

2.3 Implementation Arrangements

Appropriate transitional arrangements will need to be established to enable AEMO to set registration fees for the new category of market participant. Given that AEMO has recently completed a fee structure determination, we consider that it would not be practical nor efficient to re-open the existing determination or undertake a new fee determination at this stage.

AEMO recommends that the transitional rules be drafted to allow AEMO to charge registration fee to the new participants without needing to reopen AEMO's current fee structure determination. The amount of the registration fee would be set by AEMO as part of its annual budget (as the current fee structure allows).