Mr Rob Jackson
Australian Energy Market Operator
Level 22, 530 Collins Street
Melbourne VIC 3000

Lodged via email rob.jackson@aemo.com.au

Friday, 10 March 2017

Dear Mr Jackson,

RE: Market Ancillary Service Specification Issues Paper

ENGIE appreciates the opportunity to comment on the Market Ancillary Service Specification (MASS) Issues Paper which has been published by Australian Energy Market Operator (AEMO).

ENGIE understands that AEMO are required to review the MASS in response to the ancillary service unbundling rule change (November 2016), which allows a new class of participant – the Market Ancillary Service Provider, to participate in the ancillary services markets without the requirement to be a participant in the wholesale energy market. AEMO have also indicated that it will seek feedback on proposals to reduce barriers to entry for new market ancillary service providers, and top improve the descriptions of the services and principles.

ENGIE is generally supportive of AEMO's efforts to improve the descriptions in the MASS and to reduce barriers to entry, provided that any changes do not impose additional costs on existing ancillary service providers.

Variable generation

Variable generation currently uses the straight line interpolation method to establish a base line of what the generator would have done during the 5-minute dispatch interval if there were no ancillary services provided. With the recent enhancements to the energy conversion models for wind and solar PV generating units, generators are now able to provide to AEMO an "estimated power" figure. ENGIE understands that the where a wind generator provides AEMO with an estimated power figure, this will be incorporated into the applicable forecasting system (wind or solar) to determine the generators dispatch target. ENGIE believes that the straight line interpolation method should continue to be used for variable generation, taking into account the estimated power in those cases that the generator chooses to supply this figure.

Measurement of response across aggregated sites

The issues paper notes the difficulty in verifying the response provided by aggregated services providers, with a key uncertainty being establishing what the power flow would have been in the absence of a frequency response. Establishing the baseline of what would have occurred absent any frequency reaction is a challenge when the frequency response cannot be directly measured, and this is made more difficult when the service providers are aggregated. ENGIE is supportive of the general desire to minimise barriers to entry for these emerging distributed and aggregated resources, but is also very mindful of the importance of ensuring that power system frequency management is robust and efficiently priced.

As aggregated resources become more prolific, ENGIE expects that new technology options will develop which may help to provide solutions to the verification problem. In the meantime, ENGIE suggests that AEMO adopt a two tiered approach. The first tier should be to allow aggregators to propose a variation method to AEMO on a case by case basis, which would allow for innovative and low cost solutions. These proposals would need to be approved by AEMO, and then published so that all stakeholders are clear on what method is being applied. The second tier to the approach would be for AEMO to utilise real time power flow measurements at the relevant local connection point to build up an historical analysis of the baseline power flow for each dispatch interval. AEMO could then apply this pseudo baseline as a reasonability check to confirm the local verification method that is being used by the aggregators at that location.

High speed metering

ENGIE understands that the current requirement for fast raise and fast lower service providers to provide measurements of power flow at 50 millisecond intervals, is to allow AEMO to adjust the measured power flow to subtract the inertial response. The measurement requirements for the slow and delayed services are less onerous, at four second intervals.

When considering the potential provision of fast services from non-synchronous technology, ENGIE would suggest that the need to adjust for inertia does not arise. If this is true, then it would seem that non-synchronous technology need not be required to meet the onerous 50 millisecond measurement requirement.

Definition of the regulation services

AEMO are considering the development of a new definition of the regulation service which is more broadly based than the current AGC specific definition, with a view to ensuring different types of technology are able to participate.

ENGIE supports ensuring that different technology types are given the opportunity to provide regulation services. In considering the need for a new definition, ENGIE is unsure what the specific issue is that AEMO are trying to solve. Ultimately, ENGIE presumes that all regulation services will need to be connected to the AEMO AGC system, and will therefore need to undergo a process of tuning to achieve the appropriate control outcome. Assuming that all regulation services are still going to be controlled by the AGC system, ENGIE believes that introducing a new definition for regulation services might have the opposite effect to that being sought by AEMO – in other words, it might inadvertently introduce a new barrier to entry.

Definition of the contingency services

AEMO have proposed to include a description of the expected transition between the fast, slow and delayed services to ensure that these transitions are managed to avoid under or over delivery of services. ENGIE supports the objective behind this proposal, however is somewhat concerned that applying a new description to existing service providers might impose a new obligation or requirement that was not required in the past.

Rather than AMEO specifying a description, perhaps it would be better that all contingency services providers are required to describe to AEMO, the manner in which their plant transitions from one service to the other. AEMO would then be able to account for the sum total of these transitions, based on the contingency service providers enabled at any point in time.

Principle underlying the MASS

AEMO have proposed that the principle underlying the MASS should be related to the control of power system frequency, and not the delivery of an amount of energy. ENGIE agrees that the ultimate objective of the frequency control arrangements is to ensure secure management of power system frequency, but it is not quite so clear that this should be the principle underlying the MASS.

In ENGIE's view, the purpose of the MASS is to define the frequency control products, and the requirements that service providers will need to meet to be eligible to participate in the frequency control markets. From the perspective of an individual service provider, the obligations that it should be expected to fulfil are to ensure that when the frequency deviation occurs, it responds with an appropriate MW change.

ENGIE is concerned that if the principle of the MASS is somehow changed to make the frequency control the central principle, it might lead to an outcome whereby a service provider does what is expected in terms of MW response, but due to circumstances outside of its control, the power system frequency might remain outside of the desirable range, and the service provider might then be unfairly penalised.

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