



Mr John Pierce
Australian Energy Market Commission
Level 6, 201 Elizabeth Street
Sydney NSW 2000
Lodged via www.aemc.gov.au

Wednesday, 2 August 2017

Dear Mr Pierce,

RE: Generating System Model Guidelines (ref ERC0219)

ENGIE appreciates the opportunity to comment on the Australian Energy Market Commission (AEMC) draft determination on generating system model guidelines (draft determination).

This rule change proposal from the Australian Energy Market Operator (AEMO) seeks to increase both the scope and the level of detail of model data that AEMO may request from registered participants.

More specifically the proposed rule change would require:

- more detailed electromagnetic transient (EMT) models from generators
- broader scope of modelling data, potentially including models of network equipment, generator protection and governor systems.

AEMO have stated that these changes are required to understand how the power system will function under certain power system conditions, particularly a reduction in system strength. AEMO also note that the current obligations on participants do not provide sufficient modelling data to undertake these more detailed power system studies.





As noted in our submission to the previous consultation paper, ENGIE supports the requirement for AEMO and the network service providers (NSPs) to have access to sufficient modelling data to ensure the ongoing secure operation of the power system. As the industry transitions from synchronous generating equipment to new forms of non-synchronous generating plant, it is also clear that the nature of the modelling task is changing, along with the type of data needed.

In our previous submission, ENGIE also noted that there can be considerable costs associated with the provision and testing of detailed modelling data, and recommended that AEMO be required to establish guidelines on when and how such data can be requested.

ENGIE is pleased to note that the AEMC have acknowledged the costs associated with the provision of model data by participants, and has proposed that these be managed through predictable and clear obligations. Accordingly, the draft determination requires AEMO to set out guidelines and data sheets which describe the model data and the circumstances under which it will be required. AEMO would be governed by principles including costs and confidentiality of information.

ENGIE notes that the draft rule allows AEMO to ask for updated model information where a generator proposes to alter its generating system, in accordance with the Power System Model Guidelines, Power System Design Data Sheet and Power System Setting Data Sheet, even if such an alteration does not affect the performance of the generating system relative to the technical requirements in schedule 5.2.

The draft rule principle is that AEMO can ask for updated model information where in AEMO's reasonable opinion, there is a risk that the proposed alteration will adversely affect network capability, power system security, quality or reliability of supply, inter-regional power transfer capability or the use of a network by another network user. The draft rule also requires that in developing and amending the Power System Model Guidelines and Data Sheets, AEMO must have regard to the reasonable costs of compliance by Registered Participants compared to the likely benefits from the use of the information.

ENGIE supports this requirement being placed on AEMO to ensure that the cost of providing new modelling data does not exceed the likely benefits. ENGIE notes that a significant component of the costs associated with the provision of modelling data can arise from the need to perform power system tests to confirm the accuracy of models. Such testing activities can have an adverse effect on the condition of generating plant and can introduce an increased risk of damage to plant infrastructure. In particular, certain types of testing including step response, load rejection and full or partial load tripping can adversely impact on generator plant.

For this reason, ENGIE would like to see the new clause S5.5.7(c) make specific reference to testing as part of AEMO's reasonable costs considerations.



ENGIE trusts that the comments provided in this response are of assistance to the AEMC 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,

A handwritten signature in black ink, which appears to read "Chris Deague".

Chris Deague
Wholesale Regulations Manager

