



Generating System Model Guidelines rule change

Publication of final rule determination and final rule

The Australian Energy Market Commission (AEMC) has made a rule that clarifies what model data must be provided to the Australian Energy Market Operator (AEMO) and network service providers.

This final rule is designed to provide AEMO and network service providers with the information necessary to accurately model the power system, taking into account changed power system conditions such as reductions in system strength. This rule change complements and is part of the AEMC's broader system security reforms. An overview of the AEMC's Security and Reliability work program is attached.

Modelling the power system

AEMO and network service providers study the power system in order to be able to plan and operate it. Participants such as generators also undertake these studies when planning their investments and when negotiating connection agreements. Power system studies use models as inputs. These models are mathematical representations of how generation and power system equipment will perform under different conditions.

The National Electricity Rules (NER) currently includes a model data provision framework, which sets out the process for provision of model data from generators to AEMO and, where relevant, network service providers. This framework describes when model data must be provided, including when a generator connects to the power system, or when the generating system is changed.

Importantly, this framework applies only to generators, and does allow for additional model data to be requested other than when the generator is connecting or altering a system.

Changes in the power system, particularly reductions in system strength, mean that more detailed models may be required from a broader range of participants. The model data provision frameworks therefore require amendment, so that AEMO and network service providers can gain access to the model data necessary to continue to accurately model the power system.

The final rule

The final rule is part of the broader package of system security work being progressed by the AEMC. It includes changes to the NER model data provision frameworks that are designed to complement other reforms, particularly those related to system strength.

The final rule expands the application of the existing model data provision frameworks in the NER, to include additional participant types such as network service providers, market network service providers, ancillary service providers and customers.

The final rule also expands this framework to apply to a broader set of equipment, such as protection systems and network equipment.

Importantly, the final rule makes a number of changes designed to support AEMO and network service providers in meeting various system strength obligations.

For example, the final rule requires AEMO to have regard to the information requirements of network businesses, and sets out a process for AEMO to request model data where this is necessary for network service providers to meet their system strength obligations.

The final rule provides a clearer model data provision framework. The final rule clarifies the scope and level of detail of model data that registered participants are required to submit to AEMO and network service providers.

The final rule is also designed to provide participants with increased clarity regarding exactly when model data may be requested. In addition to the existing conditions in the NER, it provides further specification about the conditions under which AEMO may request additional data from existing participants.

It also requires AEMO to provide, in its power system model guidelines, further details of what kind of model data it will require from different participants and the specific circumstances in which this data will be required.

The final rule requires AEMO to have regard to the costs participants will face while complying with the model data provision requirements. This is intended to limit the extent of potential costs that may be imposed on participants in terms of providing additional model data.

Additionally, the final rule requires AEMO to have regard to the sensitivity of highly detailed model data. This is intended to provide as much protection as is possible to information provided under the model data provision frameworks that may be commercially sensitive to various parties.

The final rule implements a recommendation made in the Independent review into the future security of the National Electricity Market (Finkel Panel Review), that “to be approved for connection, new generators must fully disclose any software or physical parameters that could affect security or reliability.”

Background

In its rule change request, AEMO proposed to amend the NER to require generators and other parties to provide it with specific kinds of model data.

The proposed rule from AEMO included amending the NER to:

- broaden the scope and increase the level of detail of model data AEMO may request from participants, including generators, customers and network service providers
- increase the depth of model data AEMO may request from parties tendering for the provision of ancillary services.

AEMO considered that these changes would provide a number of benefits, including more effective and efficient:

- generator connection processes
- power system operation
- network planning processes
- procurement of ancillary services.

Commencement

New obligations arising from the final rule will commence on 1 July 2018 by which date AEMO must develop and publish the revised power system model guidelines and data sheets to take account of the amending rule.

For information contact:

AEMC Adviser, **Istvan Szabo** (02) 8296 7813

AEMC Director, **Christiaan Zuur** (02) 8296 7843

AEMC Executive General Manager, **Suzanne Falvi** (02) 8296 7800

Media: Communication Director, Prudence Anderson 0404 821 935 or (02) 8296 7817

