# **AUSTRALIAN ENERGY MARKET COMMISSION INTEGRATING RENEWABLES AT THE LEAST COST** Generator technical performance standards final determination 27 September 2018

# SETTING NEW TECHNICAL STANDARDS FOR CONNECTING GENERATORS TO SUPPORT POWER SYSTEM SECURITY

The power system is transitioning, with a large number of new generators like wind and solar farms set to connect in coming years, while older generators are retiring.

We need to have the right technical standards so these new generators can join the power system at the lowest possible cost while maintaining system security.

Technical performance standards include things like voltage control, frequency control and the ability to stay connected even when there's a major disturbance to the power system.

Keeping the lights on at the lowest cost WHAT THE **RULE IS ABOUT** 

This new rule provides clear boundaries for negotiations to connect new generators to the power system

Generators

connect

without technical

capabilities to

support system security can't



**Generators must** 

and networks to match their technical

negotiate with AEMO

capabilities to local

power system needs



Generators with technical capabilities to support system security are able to connect no matter where they are located

# WHAT HAPPENS NEXT

The new rule starts on 5 October 2018. For generators which have already started the connection process, the rule includes transitional arrangements to finalise their access standards by 1 February 2019.

# **MATCHING TECHNICAL REQUIREMENTS TO LOCAL SYSTEM NEEDS**

Generators that don't meet 'automatic' access standards must negotiate with networks and the market operator, AEMO, to agree on what technical capabilities they need to bring when they connect. This depends on power system conditions in the local area such as levels of system strength and inertia, and the mix of network and generation equipment.

The rule:



sets clearer roles and resposibilities so all parties - generators, networks and AEMO - know what they have to do when negotiating

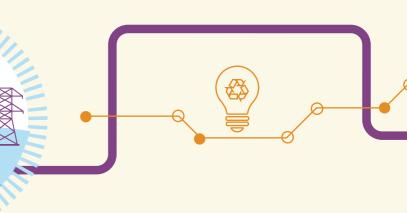


sets clearer goal posts for 'minimum' and 'automatic' access standards



tiahtens some standards where needed

This flexible approach to setting standards enables targeted, least cost ways of connecting new generation.



### **OTHER WORK UNDERWAY**

This rule change addresses the Finkel Panel recommendation to update generator connection standards.

It is also part of the AEMC's security and reliability action plan to ensure AEMO has the tools it needs to manage a power system with a growing share of renewables. This includes new rules which started in July 2018 to make networks maintain minimum levels of system strength and inertia.