

A Ś

Distribution Market Model project

The AEMC has started a Distribution Market Model project to explore how the operation and regulation of electricity distribution networks may need to change in the future to accommodate an increased uptake of distributed energy resources.

Objective and scope of the project

The uptake of rooftop solar photovoltaic systems, battery storage, electric vehicles and other technologies at the distribution level in Australia's electricity sector is having an impact on the way that consumers have traditionally been supplied with and use electricity. These 'distributed energy resources' present both opportunities and challenges.

As more distributed energy resources are installed, distribution networks are shifting from facilitating one-way flows to more dynamic, two-way flows of electricity. In the future, the operation of electricity distribution systems may need to be more actively managed, like transmission systems are currently.

The AEMC is undertaking a Distribution Market Model project to explore whether changes to distribution system operation and market design are needed to accommodate this evolution. Specifically, the project will explore:

- the technical opportunities and challenges presented by distributed energy resources;
- what, if any, new roles, price signals and market platforms are required to optimise the development, deployment and use of distributed energy resources;
- how the role of distribution network service providers (DNSPs) may need to adapt to facilitate a transition to a more decentralised market for electricity services;
- whether the existing electricity regulatory framework impedes or encourages innovation and adaptation by DNSPs to support the efficient uptake and use of distributed energy resources; and
- whether changes to the existing distribution regulatory arrangements, or the design of a new market, are necessary to address any impediments to business model evolution.

The project is not intended to be a prediction of or pathway for future regulatory reform, but rather an exploration of possible distribution market design options that may be available to harness the opportunities presented by distributed energy resources, while addressing any technical impacts as they arise.

Purpose of the approach paper

An approach paper setting out the scope and context for the project, and the AEMC's proposed approach to assessing the issues outlined above, was published on 1 December 2016.

The purpose of the approach paper is to set out:

- the scope and objective of the project;
- what the role of DNSPs is under the current market design;
- the Commission's analysis of the technical opportunities and challenges presented by distributed energy resources; and
- the Commission's framework for how the opportunities and challenges of an increased uptake of distributed energy resources will be assessed.

The AEMC welcomes written submissions on any aspect of the approach paper by 19 January 2017, as well as individual meetings with interested stakeholders.

AUSTRALIAN ENERGY MARKET COMMISSION LEVEL 6, 201 ELIZABETH STREET SYDNEY NSW 2000 T: 02 8296 7800 E: AEMC@AEMC.GOV.AU W: WWW.AEMC.GOV.AU

Background

The project forms part of the AEMC's technology work program, which seeks to explore whether the energy market arrangements are flexible and resilient enough to respond to changes in the availability and cost of energy technologies.

In order to provide advice to and assist governments with policy development, and inform our analysis of rule change requests, the AEMC needs to have a strong understanding of new market dynamics, including their likely impacts on consumer costs and behaviours as well as the incentives and business models of market participants.

Next steps

The AEMC will hold a series of public workshops in early 2017 before publishing a final report on this project in early to mid-2017. The final report will set out a range of possible distribution market design options and their advantages and disadvantages, taking into account stakeholder views.

For information contact:

AEMC Director, Victoria Mollard (02) 8296 7872

AEMC Senior Adviser, Claire Richards (02) 8296 7878

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

1 December 2016

Submissions on the approach paper are due by 19 January 2017.