Australian Energy Market Commission

DESIGNING THE GRID OF THE FUTURE

Electricity network economic regulatory framework review: final report 26 September 2019

It's a new world. The electricity system is transforming. More consumers are buying and selling power.

The AEMC is redesigning the electricity market to give consumers better control over how their solar panels, batteries, electric vehicles and other distributed energy resources are used. For consumers, this means that if you don't need all the power from your solar panels or batteries, you can sell it.

The power can be harnessed to:

help electricity networks manage peaks in demand on the grid provide technical services that help make the power system secure, such as frequency control

be sold into the wholesale electricity market to be resold to other consumers

help consumers trade energy with their neighbours Our vision is for a market where consumers buy and sell energy and demand response services in a more dynamic way – in response to prices and their own preferences.

These changes will benefit everyone on the grid – not just those with solar panels or other distributed energy resources. By making the most of what we've got, the grid can operate more efficiently, which means lower prices for all consumers.

All the market bodies – the Energy Security Board, the Australian Energy Regulator, the Australian Energy Market Operator, and the Australian Energy Market Commission – along with the Australian Renewable Energy Agency, government departments, industry and consumer groups are working together to make it happen.



Modernising the grid – key actions

Reform how customers are charged for using the grid - so they can get the most out of their distributed energy resources while minimising total system costs (to be undertaken as part of ARENA's Distributed Energy Integration Program)

Reform network pricing so customers are rewarded for using energy in a way that helps the grid work more efficiently (underway)

AER

Develop guidelines for how the AER will assess proposals from distribution businesses to integrate distributed energy resources (underway)

AER

Develop a methodology for estimating the 'value of customer export' to help distribution businesses weigh up the costs and benefits for all consumers of building more network

AER, AEMC, ARENA, consumer groups

Review the effectiveness of introducing competition in providing smart meters so customers have the tools they need to optimise their distributed energy resources. This will include monitoring the roll out of smart meters, along with assessing the potential benefits of greater data collection and availability.

Improve understanding of the information customers need about their distributed energy resources, and how third party providers can help consumers act on that information (underway)

AEMC, consumer groups

Where it is cost effective, invest in new monitoring and modelling equipment to improve the visibility of loads and voltages on the part of the grid between a customer's property and the local substation so distribution businesses can better understand current and future network constraints (underway)

Identify additional meter data that should be collected and made available to support better visibility of network constraints

Distribution businesses

Develop technical standards to support the technical integration of distributed energy resources and improve the grid's resilience (underway)

AEMO, Standards Australia Consider mechanisms to assess and improve compliance of distributed energy resources with technical standards

Jurisdictional governments and safety regulators

AEMC, DEIP

AEMC

Distribution businesses

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