

CONSUMER ROUND TABLE ON ENERGY

AUSTRALIAN ENERGY MARKET COMMISSION
PRESENTATION

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AEMC



We are the rule maker
for Australian electricity and
gas markets

What we do

We make and amend the:



National Electricity
Rules



National Gas
Rules



National Energy
Retail Rules



We also
provide market
development
advice to
governments

Market body roles



Australian Energy Market Commission

Rule maker, market
developer and expert adviser
to governments

*Protects consumers and achieves
the right trade-off between cost,
reliability and security.*



Australian Energy Regulator

Economic regulation
and rules compliance

*Polices the system and
monitors the market.*



Australian Energy Market Operator

Electricity and gas systems
and market operator

*Works with industry
to keep the lights on.*

ANNUAL ECONOMIC REGULATORY FRAMEWORK REVIEW

MONITORING IMPACTS OF DISTRIBUTED ENERGY
RESOURCES

What is it for?



- Monitor the impact of distributed energy on electricity networks and the regulatory framework



- Broad terms of reference provides flexibility to consider a range of issues

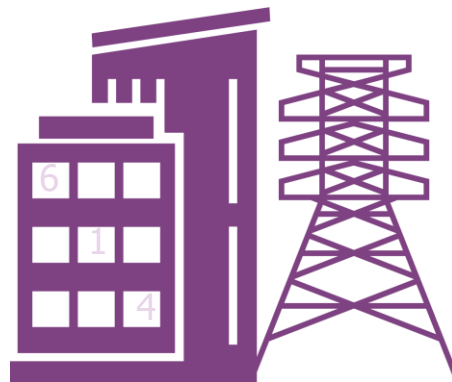


- Part of a broader distributed energy related program – for significant medium to longer-term trends and issues



What is our approach to the review?

- A regular and ongoing platform to monitor changes and developments in the national electricity market
- Working with all stakeholders of the energy sector to identify and understand risks and opportunities for reform
- If there is a need for reform ...
 - Recommend changes to the COAG Energy Council
- Progress recommendations tasked by officials and other review bodies



The economic regulatory framework needs to deliver the best outcomes for consumers

MONITORING CHANGES IN THE ENERGY SECTOR

SOME OBSERVATIONS ON DISTRIBUTED ENERGY UPTAKE

Distributed energy uptake is continuing to grow

- Consumers are choosing DER
- A range of factors driving uptake:
 - Falling costs of technologies
 - Increase in electricity bills
 - Technology improvements
 - Changing consumer attitudes to electricity supply and prices
 - Government policy

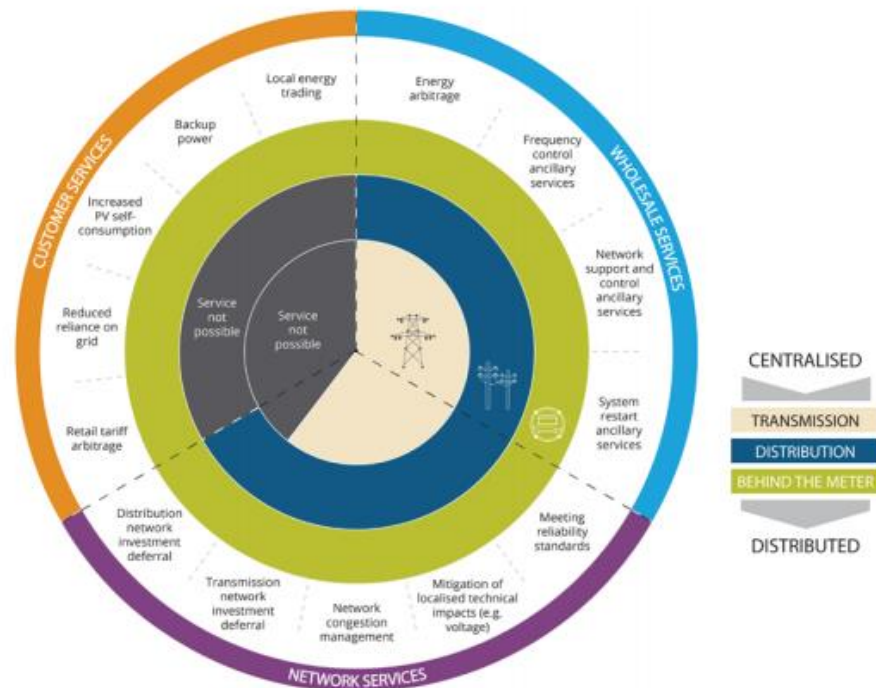


DER can provide opportunities, but there are risks if they are not managed

- DER is capable of providing value to a number of different parties

But ...

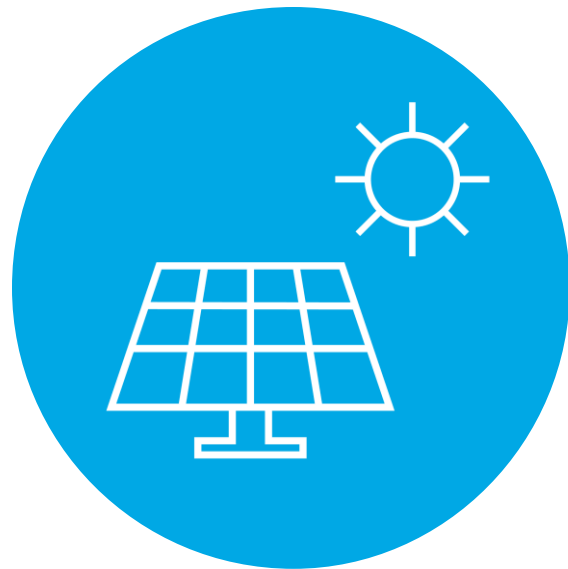
- High penetration has technical impacts if left unchecked
 - Reliability and quality of supply
 - Examples are beginning to show in some networks now



Source: This is based on a diagram that was developed by the Rocky Mountain Institute but has been adapted for the Australian context.

Harnessing the value of distributed energy resources

- Distributed energy resources can help lower whole of system costs
- Efficient integration will allow the benefits of distributed energy to flow to all customers, not just those who can afford them
- How do we encourage 'efficient integration'?
 - Rewarding distributed energy resources owners when they use their systems that do not increase network costs and improve quality and reliability?
 - Encourage network businesses to consider distributed energy resources as an alternative?



First step towards efficient integration

- A key first step – better understanding of the network
 - What is the impact of higher penetration of DER on the network?
 - Many distributors know very little about their networks beyond their zone substations
- Some blunt tools are used now to 'manage' distributed energy resources
 - Stopping additional distributed energy connections
 - Arbitrary export limits and curtailment

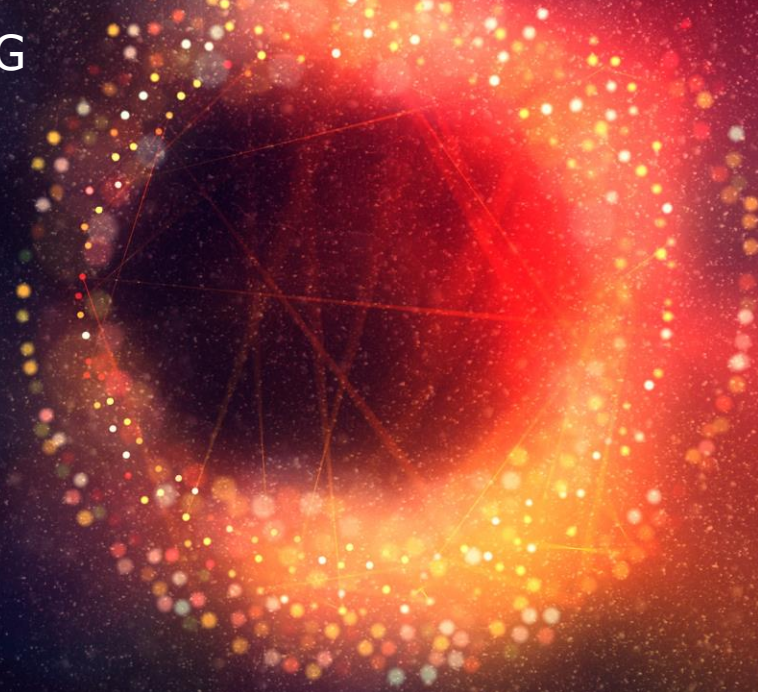
Some networks are taking the first step

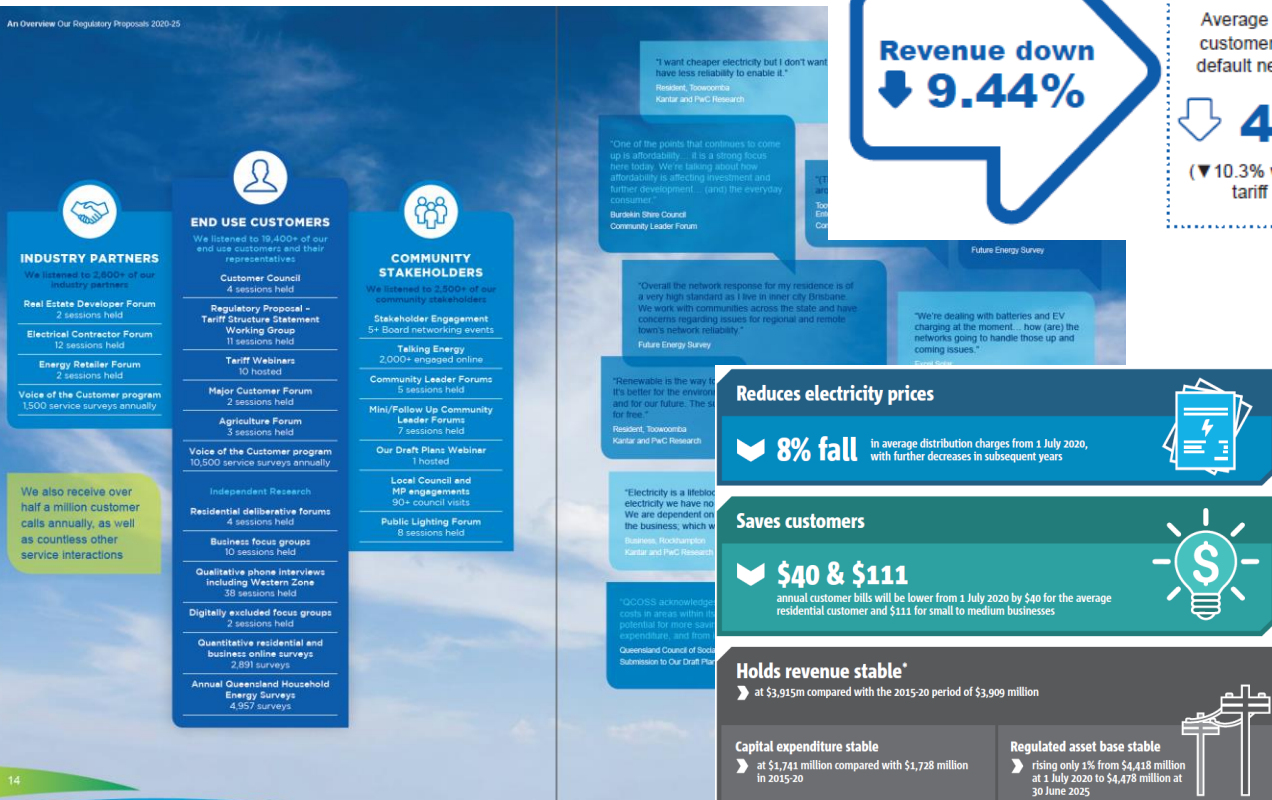
- SA Power Networks and Energy Queensland have proposed expenditure to better integrate distributed energy resources in their most recent regulatory proposal
- What is the best way to harness the value of distributed energy?
 - Building a smarter network with better monitoring?
 - Build out the network to allow more capacity?
 - Curtailing export at peak times to avoid system issues?
 - 6.1.4?



DISTRIBUTED ENERGY & THE REGULATORY FRAMEWORK

ISSUES WE ARE EXAMINING





AFFORDABLE

Lower prices

↓ **6%**

reduction in our component of network costs in residential bills from 1 July 2019

Fairer

Updated price structures

More efficient

Operating cost savings (pa)

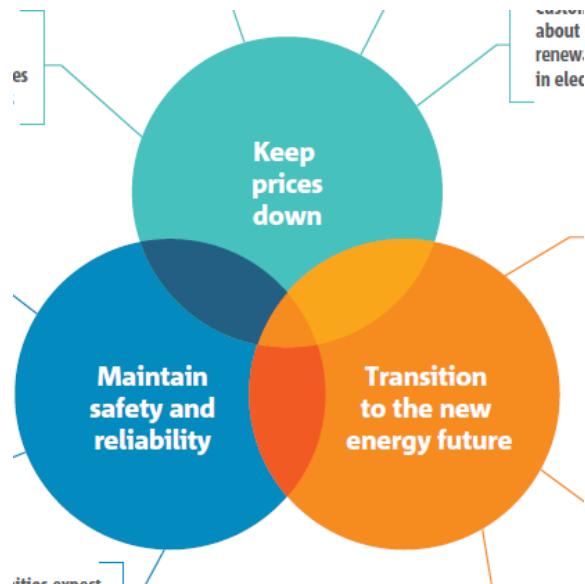
\$100m

Benefit per customer

\$76pa

The operating and regulatory environment is increasingly dynamic

- Consumer views and preferences are increasingly being incorporated into regulatory proposals and determinations
- Networks are responding to calls to become more efficient and improve affordability
 - RAB growth has plateaued
 - Proposing price reduction in the next regulatory period
- The role of networks is evolving, and they may provide different (or more) services to consumers in the future
 - But they are likely to remain monopolies - regulation will still be needed



Is the regulatory framework fit for purpose?

- The foundation elements of the regulatory framework remain the best way to deliver the best outcomes for consumers
 - Constraining monopoly behaviour through incentive-based regulation
 - Encouraging innovation and competition where possible
- Supporting sector transformation
 - Providing regulatory stability for confidence and flexibility to respond to changes
- There is always room for improvement

The changing environment provides opportunities

- Providing a more structured and systematic approach to support innovation – regulatory sandboxes
- Extending the demand management incentive scheme and innovation allowance to transmission networks
- Enabling new technologies to help reduce energy cost
 - New technologies and rapidly reducing cost make alternative supply options viable now
 - Our current review on arrangements for stand-alone power systems



But there are also risks ...

- Barriers to consumer engagement remains
- Incentives to choose the most efficient investment – are they providing the right balance?
 - Network businesses are likely to have different solutions to a given set of network problems
 - Choosing the most efficient solutions, rather than one that provides the greatest financial returns
- There are some 'cost of service' elements in the framework – increasing use of contingent project is a concern
- Slow pace of network pricing reforms; lack of price signals

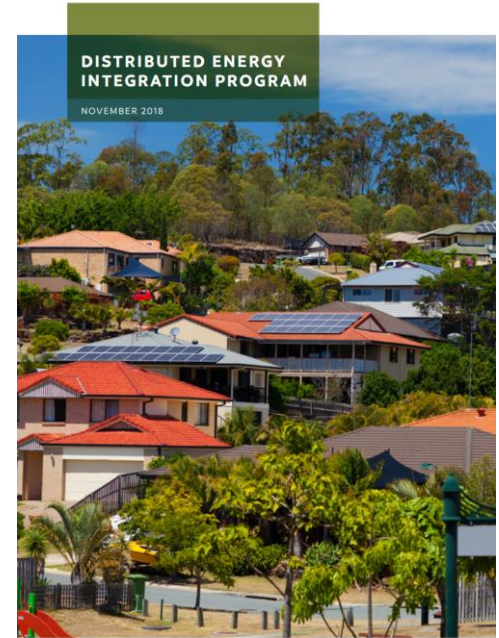


WORKING WITH THE INDUSTRY

CONTRIBUTING TO OTHER INDUSTRY INITIATIVES

A collaborative approach

- We are working closely with the industry on related DER initiatives
 - AEMO/ENA Open Energy Networks
 - ARENA's Distributed Energy Integration Program



A SMALL ADVERTISEMENT



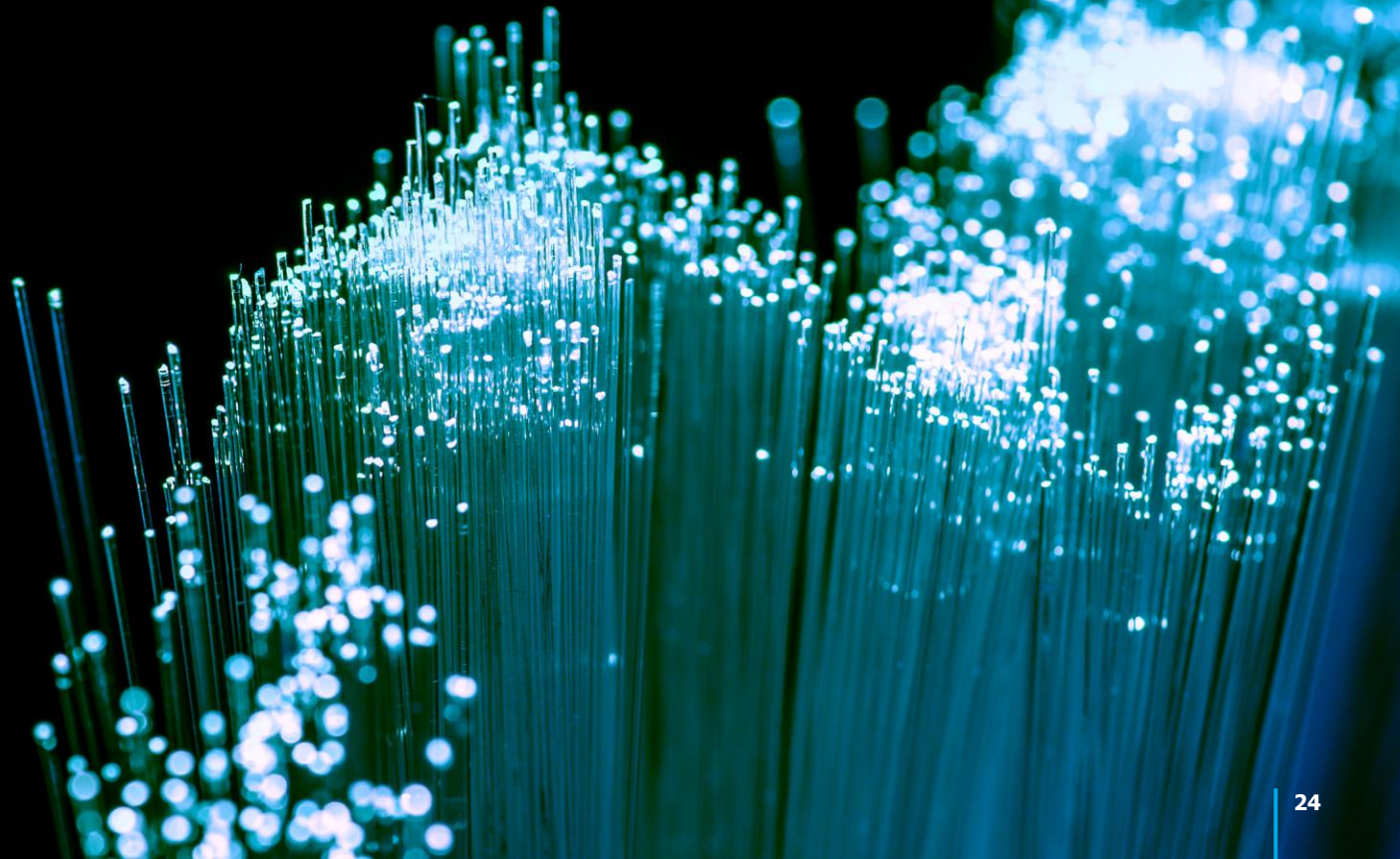
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Public workshop on network incentives

- Considering the issue of network expenditure and remuneration in the context of energy sector transformation
- Interactive panel discussion involving new technology providers retailers, AER, ECA, Energy Networks Australia
- Wednesday 6 March, 10.00am – 2.30pm
- Melbourne (Rydges Melbourne)

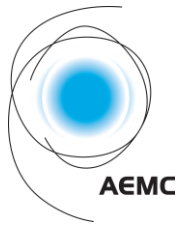
YOUR THOUGHTS?

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We would like to hear your views

- The annual economic review is an important and structured mechanism to examine issues and consider potential reforms if necessary
- We need to broaden the discussion beyond regulators and network businesses
- What are your views on the issues we are considering currently?
- Are there other issues we should be thinking about?



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