



## 2019 Electricity networks economic regulatory framework review

### Integrating distributed energy resources for the grid of the future

The Commission has published the final report for the 2019 Economic regulatory framework review (2019 Review). The Commission has a standing terms of reference from the COAG Energy Council to monitor market developments on an annual basis, and consider whether the economic regulatory framework for electricity networks is sufficiently robust and flexible to continue to support the long term interests of consumers in a future environment of increased decentralised energy supply. The 2019 Review is the Commission's third such report.

The electricity sector is undergoing a major transformation. Distributed energy resources – such as solar panels, battery storage and electric cars – are fundamentally changing the way consumers engage with energy markets. They can help to deliver clean, secure, reliable and low cost power for everyone on the grid.

The focus of the 2019 Review is the integration of distributed energy resources into the energy market system, which is one of our strategic priority areas of reform. In this year's report, the Commission sets out a range of options to create more dynamic markets and manage network challenges created by increasing penetration rates of distributed energy resources. We highlight work that is already underway to implement distributed energy resources effectively, what we are planning to do next and whether we see any gaps. Some issues require urgent action. For others, we have time to consider the broader implications for the regulatory framework.

### The Commission's vision – integrating distributed energy resources for the benefit of all customers

The Commission's vision for the future electricity system is one of two-way trade of electricity and services in a wholly connected energy market. If effectively integrated into the grid, the increasing proportion of grid scale and distributed renewable generation can create greater competition in the wholesale market for electricity. Also, distributed energy resources can be used to help electricity networks manage peaks in demand on the grid and technical challenges created by 'reverse flows'. This adds up to lower costs for consumers and a secure and reliable power system.

As technology improves and becomes cheaper and more accessible, and appropriate consumer protections are developed, services such as network support and demand response may no longer be restricted to large customers. Distributed energy resources play an important role in this future.

The regulatory framework should be centred on outcomes that maximise benefits to all consumers. To this end, the Commission is considering how to create a dynamic energy market system whereby consumers are rewarded by buying, and selling energy and demand management services to the parties who value them the most, in response to efficient price signals and their own preferences.

### Better ways to facilitate higher penetration of distributed energy resources

The Commission considers new reforms are necessary to transition to the grid of the future, particularly to the way electricity is priced and to allow for different access and connection services to be provided by network distribution businesses.

Pricing is one of a number of 'tools' that can be used to optimise the benefits of distributed energy resources for the Australian community. Network prices have been used to signal to the customer the impact their electricity consumption has on current and future network costs. The role of network prices will need to evolve as consumers' use of the electricity

system changes with the increasing uptake of distributed energy resources. Network charges for the use of the 'poles and wires' to transport electricity to meet household demand could apply to 'exports' into the grid, as well as energy consumed by the customer.

Changes to distribution pricing arrangements cannot be considered as a stand-alone issue as they have flow on implications to the distribution access and connections framework. In the long term, reforms to the access framework may be required to provide further options to optimise the provision of distributed energy resources. Some potential reforms include allowing consumers to select varying levels of static export limits and choose different levels of 'firmness' – that is, options for some consumers to be rewarded for allowing their solar panels to be 'constrained off' from exporting into the grid at certain times of the year.

### **Moving forward**

The successful transition of the energy sector requires a shared vision, and cooperation and collaboration between all parts of the sector. The market bodies, industry and consumer groups are currently working together to develop a package of reforms to realise the benefits of the future energy market. We will continue to consult with stakeholders to help shape this new reform agenda.

Through the Distributed Energy Integration Program (DEIP), the Commission will work closely with stakeholders who intend to submit rule change requests to progress reforms to distribution access, connections and charging arrangements.

For information contact:

Director, **Ed Chan** 02 8296 7839

Technical Specialist, **Anthony Bell** 02 8296 0642

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

26 September 2019