



# Wholesale electricity market performance monitoring

**2018 Focus**

March 2018

© Commonwealth of Australia 2018

This work is copyright. In addition to any use permitted under the Copyright Act 1968, all material contained within this work is provided under a Creative Commons Attributions 3.0 Australia licence, with the exception of:

- the Commonwealth Coat of Arms
- the ACCC and AER logos
- any illustration, diagram, photograph or graphic over which the Australian Competition and Consumer Commission does not hold copyright, but which may be part of or contained within this publication. The details of the relevant licence conditions are available on the Creative Commons website, as is the full legal code for the CC BY 3.0 AU licence.

Requests and inquiries concerning reproduction and rights should be addressed to the Director, Corporate Communications, Australian Competition and Consumer Commission, GPO Box 3131, Canberra ACT 2601 or [publishing.unit@accg.gov.au](mailto:publishing.unit@accg.gov.au).

Inquiries about this publication should be addressed to:

Australian Energy Regulator  
GPO Box 520  
Melbourne Vic 3001

Tel: 1300 585165

Email: [AERInquiry@aer.gov.au](mailto:AERInquiry@aer.gov.au)

AER Reference: 60382–D18/37100

## Introduction

The AER has powers under the National Electricity Law (NEL) to undertake regular, comprehensive, longer-term assessments of the performance of wholesale electricity markets.<sup>1</sup> We will provide our first comprehensive report on the performance of Australia's wholesale electricity markets to the Council of Australian Governments Energy Council (COAG EC) in December 2018.

We will report on whether:

- there is effective competition in the wholesale market or there are features of the market that may be detrimental to effective competition
- there are features of the market that may compromise the efficient functioning of the market.

This 2018 Focus provides an overview of the context of the 2018 performance report, the areas we intend to focus on in 2018 and the framework and tools we intend to apply. The 2018 Focus sits alongside our high-level and enduring statement of approach. In future reports, we expect the wholesale markets will evolve and the issues we focus on will change.

## Current market conditions

Electricity markets in Australia are transforming, largely driven by technological change. Government policies are encouraging a different mix of generation. At the same time, the cost and availability of key fuels for electricity generation, such as coal and gas, have changed. Wholesale electricity markets are experiencing some unique changes as a result of these drivers:

- The age of the existing large scale generators in Australia, the lower cost of new technologies, and government policy have resulted in a shift away from large, centralised thermal generators to smaller, distributed resources, many of which are intermittent.
- Households and businesses are changing the way they use electricity, and new markets are emerging.
- The types of risks faced by energy businesses are evolving, requiring new ways to manage them.
- Advances in metering, batteries and controllable consumption devices mean consumers can take a more active role in their use of energy, and demand response is occurring more frequently.
- The proposed national energy guarantee will further affect wholesale market outcomes.

The extent of change in the energy sector and resulting industry structure has caused concern regarding the current and future competitiveness of wholesale electricity markets.

---

<sup>1</sup> Part 3 Division 1A

## Markets we will focus on in 2018

There is a wide range of products and services we could consider in our analysis. In addition to analysing the electricity spot market, in 2018 we will also consider the following:

- Derivatives products – the derivatives products traded on the Australian Securities Exchange (ASX) are public information. We are interested in working with industry to develop ways to improve the quality and availability of information regarding over-the-counter (OTC) transactions, which are not traded on the ASX. Stakeholders have noted the expected return of the Australian Financial Markets Association's stakeholder survey to gather and report limited information on OTC electricity derivatives.
- The renewable energy target (RET) and the markets for large-scale generation certificates (LGCs) – we intend to consider the extent to which the financial incentives created by the RET interact with outcomes on the wholesale market.
- Frequency Control Ancillary Services (FCAS) – we will assess competition and efficiency in the FCAS market using similar measures as for the spot market. As well as monitoring FCAS for the NEM as a whole, we will also spotlight FCAS issues in South Australia due to South Australia's high reliance on renewables and the fact that it often forms a regional market.
- Demand response – we intend to consider the extent to which we can publish information on demand response and how it affects the wholesale market.

## The framework and tools we will use

The overall framework we will use for our analysis will be the structure-conduct-performance approach. This framework is set out in our statement of approach.<sup>2</sup>

We have identified a number of initial measures to provide a base level of analysis that we will build on and develop over time. As our approach develops and data sources expand, we expect we will be able to refine and target these measures further. We will carefully communicate the use and interpretation of the tools we use.

### Structure

We will examine the factors that may provide a competitive constraint on the behaviour of market participants as well as those factors that may facilitate the exercise of market power.

We will do this by considering the range of structural factors we identified in our Statement of approach, including:

- Market concentration and power
- Barriers to entry and exit
- Vertical integration

---

<sup>2</sup> AER, Wholesale electricity market performance monitoring, Statement of approach, p. 11.

We will also consider the factors we included in our NSW electricity market advice<sup>3</sup> and Hazelwood advice<sup>4</sup>, such as interconnector flows, upstream fuel costs and changing price setters.

In addition, we will consider the supply-demand balance. Monitoring volatility and peak periods, as well as comparing demand and capacity figures will provide insights about the extent to which the underlying supply and demand conditions are driving market outcomes.

## Conduct

In 2018, we will focus our analysis on generator offer and re-bidding behaviour. In particular we will consider the extent generators engage in economic and physical withholding. For example, we will assess the link between high prices and plant capacity use as a possible indicator of physical withholding. We will also collate the findings of our regular review of generator offer and rebidding behaviour and the generators' reported reasons for rebidding.

## Performance

### The relationship between prices and underlying costs

The definition of effective competition in the NEL requires us (among other things) to consider whether prices are determined in the long run by underlying costs. In 2018, we will explore using the Levelised Cost of Electricity (LCOE) curves for various technologies by region and comparing it to the annual time weighted average price in each region of the NEM. This analysis will provide the first of a series of indicators of long run costs for further investigation. We expect to provide additional information and seek feedback on our anticipated use of LCOE in the near future.

### Efficiency

The NEL also requires us to assess the efficiency of the market and identify any factors that may be impacting detrimentally on that efficiency. We will consider the three common components of efficiency we discussed in our Statement of approach in different ways. For example:

- Productive efficiency – examining inefficiencies from higher cost generation being dispatched in place of lower cost generation.
- Allocative efficiency – determining if the allocation of resources are maximising the net benefit.
- Dynamic efficiency – looking at how innovation and investment decisions are made over time.

---

<sup>3</sup> AER, Wholesale electricity market performance monitoring, NSW electricity market advice - December 2017

<sup>4</sup> AER, Wholesale electricity market performance monitoring, Hazelwood advice - March 2018