## AUSTRALIAN ENERGY MARKET COMMISSION RELIABLE, SECURE ENERGY AT THE BEST PRICE FOR CONSUMERS THREE NEW REPORTS ADDRESS ISSUES OF MARKET TRANSFORMATION

The face of the power system is changing. Lots of new wind and solar generation has entered in response to mechanisms like the large-scale renewable energy target. Now the generation mix is changing as old coal-fired power stations leave the market. Contract supply is shrinking and prices are rising.



### HOW OPTIONS TO CUT ELECTRICITY EMISSIONS STACK UP

#### Emissions intensity target (EIT)

Dirty generators pay cleaner generators to offset their emissions

Cheapest way to meet electricity demand and the emissions reduction target

This mechanism still works if future conditions are not as expected

Supports switch to gas, which helps mitigate system security challenges Extended large-scale renewable energy target

Extending the current LRET has the highest cost to the economy

This mechanism targets renewables rather than emissions so its ability to achieve emissions targets is uncertain

Makes it harder to maintain power system security

#### Regulatory closure

Government-led closure of coal-fired power stations results in the highest electricity bills for customers

Depends on governments guessing which power stations to close and when – and sticking to their schedule

### KEY PROJECTS UPDATE DECEMBER 2016



#### Integration of energy and emissions reduction

Our advice to the COAG Energy Council identifies the cheapest way to reduce emissions with the lowest impact on consumer prices. This makes it possible for the electricity sector to contribute to Australia's Paris commitment on the 2030 emissions reduction target.

The cheapest mechanism makes dirty generators pay clean generators to offset their emissions. Reduction target. Business as usual is not an option if we want to maintain energy security and meet an emissions

It encourages the sustainable growth of renewables.



# System security market frameworks review

reduction target.

This interim report calls for submissions on options for new market frameworks to promote power system security as the market transitions to new technologies and renewables.

Due to different technical characteristics the widespread deployment of new technologies will have major impacts. We want to encourage innovation. The AEMC is working with AEMO on market frameworks which allow continued takeup of new generating technologies while maintaining security.

More efficient gas markets will also provide fast-start backup for intermittent generation and improve the power system's ability to integrate renewables.

Increasing gas market efficiency is vital for maintaining power system security. Following the AEMC's gas market review, governments agreed to implementing reforms to enable faster and more efficient gas trading along the east coast.

## 2016 residential electricity price trends

The announced closure of Victoria's Hazelwood power station in 2017 is expected to increase household prices. The challenge is to reduce emissions in a way that maintains a reliable, secure power system at the best price to consumers.

Generator retirements reduce supply and put upward pressure on wholesale prices. Intermittent generation can lead to more price volatility, risks and costs to

