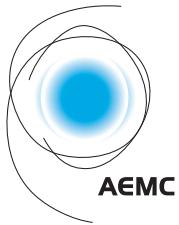


AEMC



ANNUAL REPORT
2018-2019



Australian Energy Market Commission
Level 6, 201 Elizabeth Street
Sydney NSW 2000

30 September 2019

The Hon Dan van Holst Pellekaan MP

Minister for Energy and Mining
GPO Box 974
Adelaide SA 5001

Dear Minister

I am pleased to present the Australian Energy Market Commission's 2018-2019 annual report.

This report is prepared in accordance with Section 27 of the *Australian Energy Market Commission Establishment Act 2004* (SA).

A handwritten signature in black ink, appearing to read "John Pierce". It is written in a cursive style with a long horizontal line extending from the end of the signature.

John Pierce
CHAIRMAN

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The energy sector today is different from top to bottom. This rapid change is people-driven and market-driven as new technologies move us away from a system of large, remote, power stations towards smaller, distributed generators. Our job is to facilitate structural change without putting cost burdens on households and the Australian economy that could be avoided with better planning and more efficient regulation.

4

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Provides audited financial statements for the AEMC

129

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Under section 27 of the Australian Energy Market Commission Establishment Regulations 2005 we must include specific reports which are provided here together with a compliance index

Compliance **144**

COVER IMAGE: STEPHANIE FLECHAS, AEMC, ADVISER, SUZANNE FALVI, AEMC, EXECUTIVE GENERAL MANAGER AND JOSEPH NUNEZ, AEMC, QUANTITATIVE ANALYST



BRONWYN ROSSER, COMMUNICATIONS SPECIALIST, AEMC

THE AEMC'S WORK TO
REDESIGN THE MARKET
IS ACCELERATING. WHILE
OUR WORKLOAD IS RISING
WE REMAIN COMMITTED
TO MEANINGFUL
CONSULTATION WITH OUR
STAKEHOLDERS.

90

PROJECTS

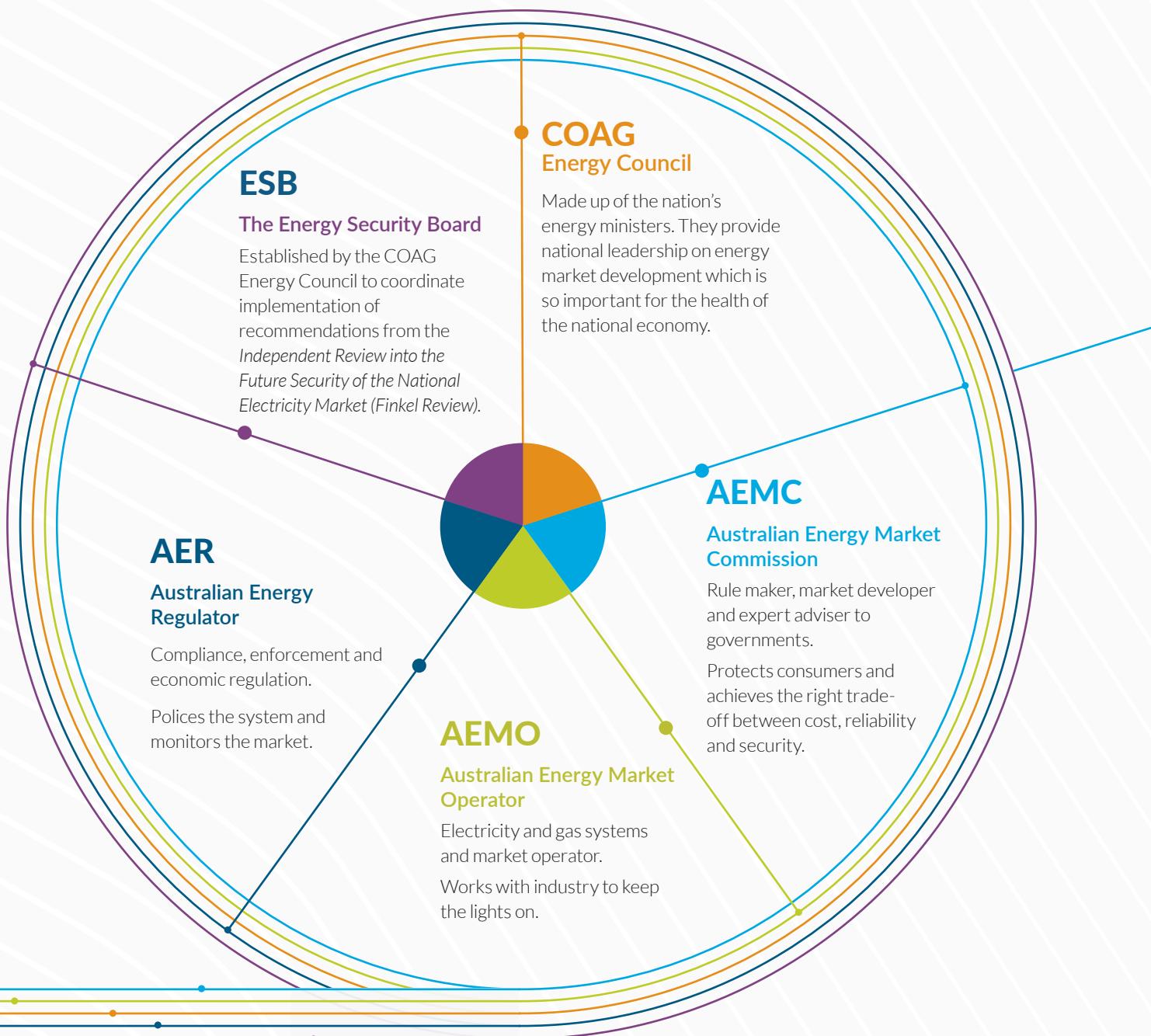
94%

OF RULE REQUESTS
COMPLETED WITHOUT
EXTENSION

79%

OF RULE REQUESTS
INITIATED WITHIN
FOUR MONTHS

How energy markets are governed



How we work

AEMC

The AEMC undertakes reviews and provides the COAG Energy Council with advice on improvements to the design of regulatory and energy market arrangements that will benefit consumers in accordance with the national energy objectives.

We also make and amend rules under the National Electricity Law (NEL), the National Gas Law (NGL) and the National Energy Retail Law (NERL).



National
Electricity
Law (NEL)



National
Gas Law
(NGL)



National
Energy Retail
Law (NERL)

Performance summary

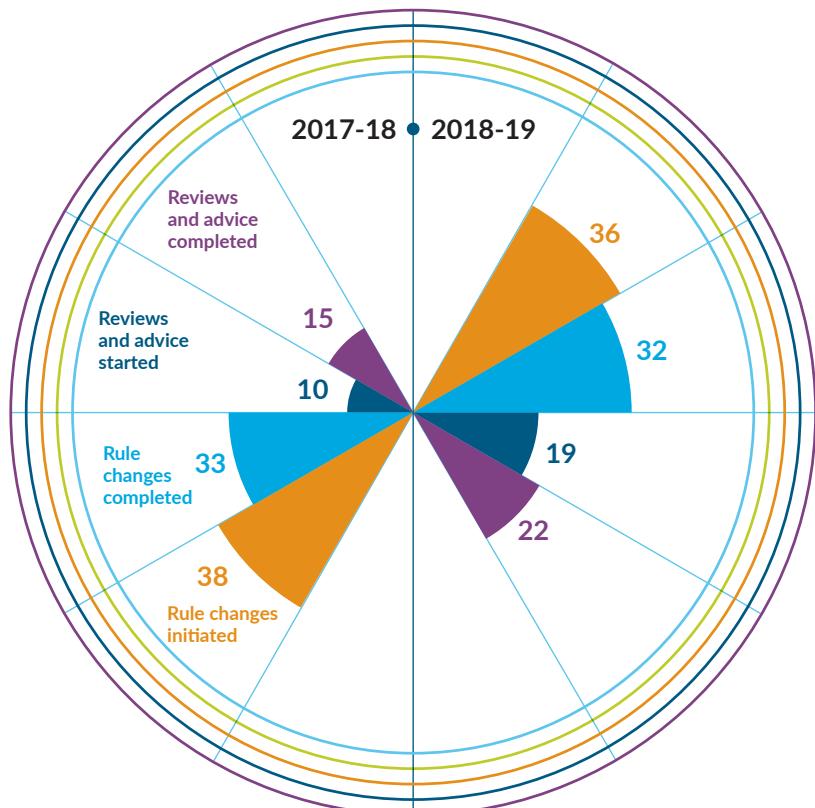


95
EMPLOYEES

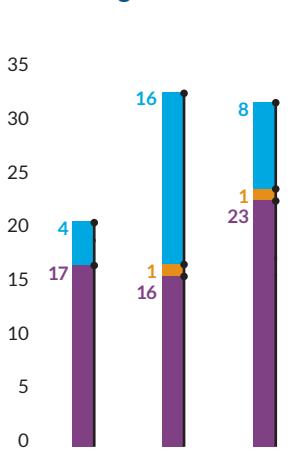


90
PROJECTS

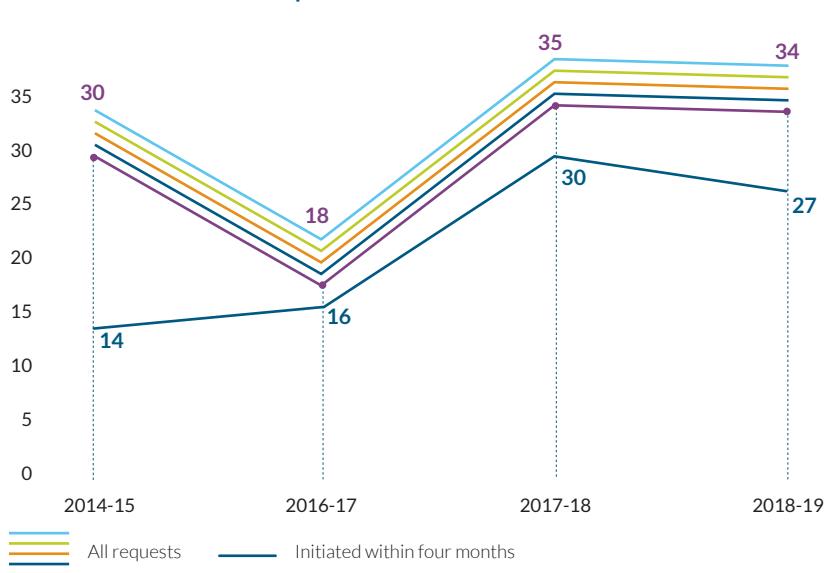
Rule changes, rules and advice started and completed



Working faster – categories for completed electricity and gas rule changes



Starting rules faster after stakeholders send us requests





1063

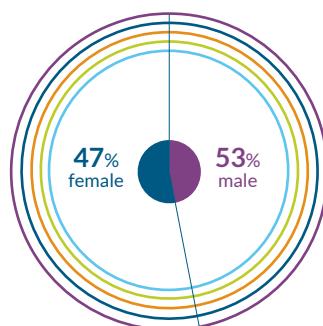
LEADERSHIP
GROUP FORMAL
STAKEHOLDER
MEETINGS



846

SUBMISSIONS

AEMC by gender



28

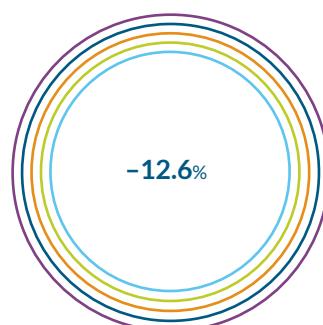
FORUMS AND
WORKSHOPS



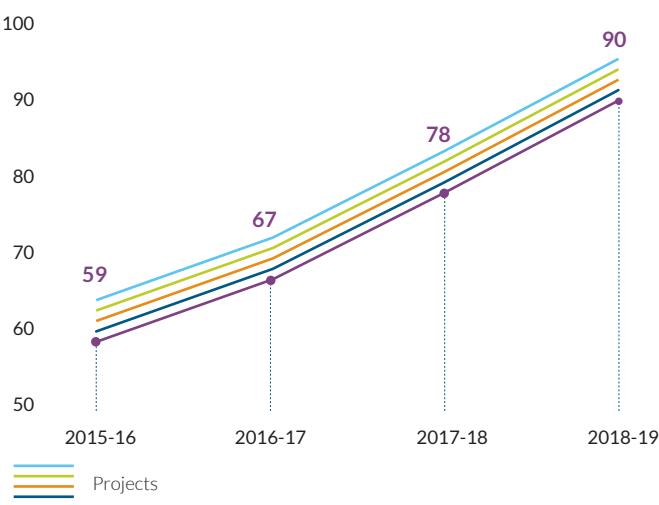
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OUT OF 10
FOR CONSULTATION

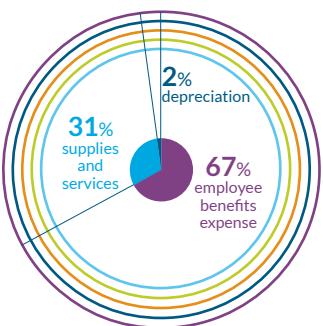
Annual expenditure within budget
(target +/- 5%)



Projects completed and underway



Actual expenses



Chairman & Chief Executive message

This year has underlined the continuing seismic shift in Australia's energy markets. Structural change in the power system is happening all around the nation. Government policies at state and federal level have done their job, incentivising the penetration of wind and solar across the grid and comprehensively changing the economics of generation. South Australia in particular is now a world-leading adopter of renewable generation.

Planning for the future

We are seeing more households and businesses generate their own local power. The importance of this change cannot be underestimated. The energy sector today is different from top to bottom and changing daily as the nation moves away from a system of large, geographically concentrated power stations to distributed, smaller generators made possible by new technologies and driven by the shift to lower emissions.

Consumers using technology to drive change

On current trends we are going to see consumers continuing to drive change over the next decade. This may include another big leap in the use of solar rooftop PV combined with battery storage as equipment prices drop; technology-enabled demand response

on a wider scale; and development of community microgrids with peer to peer trading allowing people with rooftop solar to sell directly to their neighbours.

The technology revolution offers opportunities and benefits for customers to take control of how they buy, sell and use energy. Over time, this should allow for greater utilisation of the existing stock of generation and network capacity, lowering average costs for all consumers.

But, there are also challenges that we are addressing in order to realise the full benefit of new technology and to meet consumer expectations.

Again this year our work program continued to address the changing energy landscape which features:

- increased and growing penetration of distributed energy resources which make it more complicated to predict the shape of electricity demand over the course of a day, and harder to control frequency and voltage minute by minute across the grid
- ageing generators being replaced by new technologies with vastly different characteristics which are changing how the power system needs to be managed
- the need for expanded networks to connect new wind and solar farms that are setting up in more remote and sometimes difficult geographic locations, with all the technical complexities that brings
- changing weather patterns that also place extra demand on the power system.

These changes require significant new investment in the energy sector so new technology can be integrated and utilised, and the power system can be managed securely.



John Pierce
CHAIRMAN



Anne Pearson
CHIEF EXECUTIVE

Market behaviour starting to improve

The *Retail energy competition review 2019* showed a pleasing shift in market behaviour with retailers now moving towards simpler, more stable priced deals and away from confusing offers. The report showed increased competition had led to price cuts and large reductions in market concentration.

Today we are seeing signs of a more engaged market that is responding positively to greater product innovation and bundling – and producing positive outcomes. The entry of global battery providers like Tesla and Sonnen partnering with local energy entrepreneurs to provide new deals on battery and solar PV options is also a welcome development.

Dominant players in the market are under pressure as consumers get to reap the benefits of a market where there are more participants and more real choices.

There is considerable change ahead for Australia's retail energy market with the re-introduction of retail electricity price regulation in Victoria, New South Wales, South Australia and south-east Queensland from 1 July 2019. With this comes a reference price for discounts which is designed to make shopping around for energy easier. We are working with governments to monitor the impacts of new policies including changes that may disadvantage consumers or deny them access to the best possible offers.

Collaborating with market bodies on our future work program

Over the past year our rule changes and reviews have gone directly to areas of importance for the other market bodies including processing of rule changes from AEMO on enhancements to the reliability emergency reserve trader, frequency control management, interventions compensation and settlement; rule changes from the ESB Chair and other policy work to support implementation of the integrated system plan; and supporting the ESB's post-2025 market design project.

In the year ahead our work program detailed within this report will continue to go to the heart of market design.

There are five key trends changing the way the physical power system operates, the way we regulate it and the way customers experience it. These are not the only areas of reform needed to serve the long-term interests of customers, but they are five areas within the AEMC's legal remit that we believe to be the most urgent. We will be prioritising rule change requests and other work to deliver the changes in these areas so customers can access safe, secure and reliable energy at the lowest possible costs as we transition to a lower emission sector over time.



The AEMC is Australia's representative on the World Energy Council which organises the triennial world energy congress. Chairman John Pierce addressed the 24th Congress on 12 September.

Government policies at state and federal level have done their job, incentivising the penetration of wind and solar across the grid and comprehensively changing the economics of generation. South Australia in particular is now a world-leading adopter of renewable generation.

Chairman & Chief Executive message continued

1 The shift from large geographically concentrated to small geographically dispersed generation.

This requires us to rethink how we improve access to the grid so consumers get wind and solar power at lowest cost as the power system shifts.

2 Power system services that were previously provided for free as a by-product of power generation are now not necessarily provided by new generation.

This requires us to fix the system security challenges that come with new technologies.

3 Customers are increasingly adopting small-scale solar and energy storage technologies.

This requires us to rethink how network infrastructure is used so customers and the grid can get the most out of these technologies.

4 The power system and market are increasingly underpinned by digital technologies that make it easier choose and control how, when and where power is delivered and used.

We are embracing market frameworks to increase opportunities for people to use smart technologies to self-manage their energy and bills.

5 More variable demand from customers and more variable supply from generators makes forecasting a challenge and adds risk to operational and investment decisions.

We are focussed on maintaining the link between financial incentives facing market participants and the physical needs of the system.

In particular we are working with the other market bodies, AEMO, the AER and the Energy Security Board, and collaborating with stakeholders to:

- move towards a truly two-sided market, using demand response as an alternative to peak, high-cost generation
- find the right balance between reliability and efficiency outcomes including how and when the market operator should intervene in markets to keep the lights on
- decide how the transmission backbone should be planned, built and paid for so new generation can be integrated efficiently
- reward consumers for their investments in solar, batteries and smart home systems in ways that could reduce costs for everyone through a more efficient grid.

National energy objectives and climate change

The national energy objectives for electricity, gas and retail energy target price, quality, safety, reliability and security of supply. When assessing a rule change or a review, the AEMC considers how particular decisions would impact consumers in terms of these variables. In addition we have the discretion to consider other relevant variables which may have indirect impacts on price, quality, safety, reliability and security of supply. Climate change is an example of this.

The way the physical world changes as a result of climate change (adaptation risk) and the way policy makers, consumers and investors respond to the risks presented by climate change (mitigation risk) has material impacts on electricity and gas sectors. Climate change is therefore something we must consider.

In order to make decisions that meet the national energy objectives, we consider whether those decisions stand up to any physical impacts or government and community responses to climate change. We maintain a close dialogue with our stakeholders to clearly identify the direct and indirect impacts of our decisions. During the year under review we updated our guide to applying the energy market objectives in order to support this engagement.

Working smarter and faster

Our workload increased significantly in the year under review. At 30 June 2019 we had completed 32 new rule change requests and 22 review and advice projects with another 36 projects underway and continuing into the new financial year. That was a 15% productivity increase for an organisation of the same size.

To achieve these efficiency gains we have reviewed the way we manage both rule making and review processes. Today we often conduct reviews and associated rule changes in parallel, working closely with stakeholders who decide they may want to submit rule requests during the course of a review project. We are also grouping rule requests when they relate to similar issues, starting them sooner and finishing faster.

Valuing our stakeholders

What hasn't changed is our commitment to extensive, timely and meaningful consultation. Given our expertise and capability we extended our support to energy ministers and their departments during the year under review, providing advice and information on a range of policy areas. This year we also brought economic modelling capacity in-house to better service jurisdictional needs for timely, targeted advice and to strengthen our own decision-making.

We have also escalated engagement to reach a broader range of stakeholders. In addition we routinely establish technical working groups and expert advisory groups in order to involve stakeholders in our most complex work and enable them to help test our thinking. To this end our economic analysis team has established a quarterly forum for investors and analysts providing a platform for discussion around issues relating to new investments in the energy sector.

Thanking our staff

The AEMC's ability to serve the long-term interests of consumers rests with the quality of our people. We have formulated a staff development program which helps AEMC staff cultivate the skills required to work independently, and build trusted relationships with our stakeholders. Our graduate program is now embedded in the organisation with our current intake focussed on expanding our cohort of young engineers.

We welcome a new face to the Commission with Merryn York joining us in August 2019. Merryn replaces Brian Spalding who retired on 18 April 2019 who we recognise and thank for his contribution to the AEMC and the Reliability Panel during his nine-year term as a Commissioner and to the energy sector as a whole over his distinguished career.

Just after the close of the year under review Catriona Webster, who served as General Counsel, left the AEMC to pursue other career opportunities. We thank Catriona for her dedication to the role and her long service to the organisation.

The energy transition is not unique to Australia, it is a global challenge, and we confidently face the future knowing that we have close working relationships with stakeholders who are committed to working with us to find robust and lasting solutions to the challenges we face.

On behalf of the Commission we would like to thank you all – staff and stakeholders alike – for your commitment to advancing the strategic development of the nation's energy markets in the long-term interests of Australian energy consumers, their families and businesses.



John Pierce
CHAIRMAN



Anne Pearson
CHIEF EXECUTIVE



Commissioner Brian Spalding and AEMC Chief Executive Anne Pearson at a stakeholder reception to mark his retirement in April 2019.

There are five key trends changing the way the physical power system operates, the way we regulate it and the way customers experience it. These are not the only areas of reform needed to serve the long-term interests of customers, but they are five areas within the AEMC's legal remit that we believe to be the most urgent.

"If we keep putting the right frameworks and safeguards in place we can harness the power of transformation to cut costs – we are getting on with structural reform and paying attention to what's best for consumers."

JOHN PIERCE
CHAIRMAN



LEFT TO RIGHT: BEN DAVIS, DIRECTOR; THOMAS LOZANOV, ADVISER; ALAN RAI, DIRECTOR, AEMC

WORK PROGRAM

2018-2019

32

RULES
REQUESTS
COMPLETED

22

REVIEWS
AND ADVICE
COMPLETED

36

PROJECTS
ONGOING

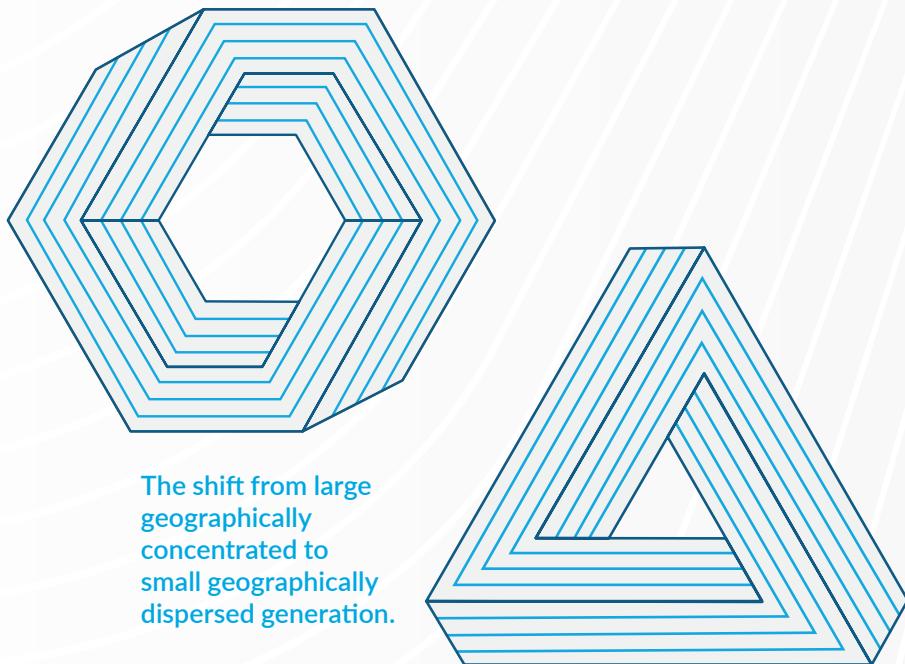
Keeping costs down for consumers is our top priority

We are working on issues that ultimately have big impacts on families and business. The cost of change is the key consideration in our work on reliability standards, security, consumer protections, and the electricity and gas networks of the future.

In examining issues that are important for market development we are very focussed on the rising level of intermittent power in the national electricity market. We know people are interested in renewable energy and want to help fight climate change. The task now is to support a smooth transition at least cost to consumers.

We are collaborating with stakeholders to go where consumers want to be in the future.

We are making new rules to help consumers benefit from the structural reform that's already underway. We are focussed on **five key trends** in the market today and are prioritising reforms in these areas. These trends and associated reforms are:



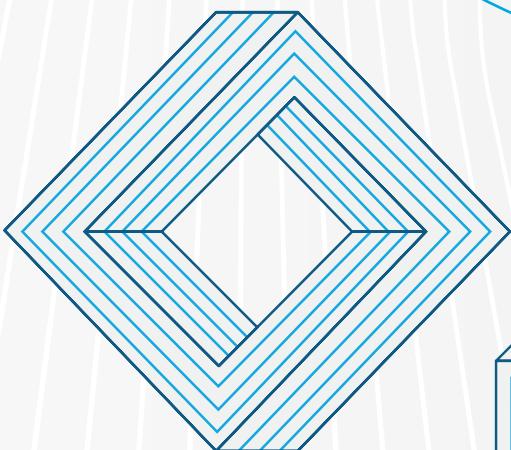
Delivering the best outcomes for consumers

The energy system is evolving. Fast.

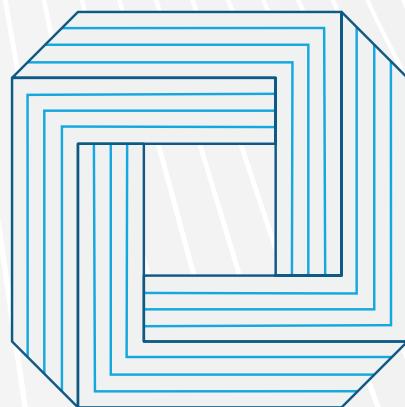
And as this change happens we are addressing the real business of serious structural reform.

We are required by law to consider, as soon as practicable, all the rule requests we receive. Given the speed of change underway in the energy sector, we moved this year to provide guidance around the types of rule changes it is important to prioritise within our overall work program.

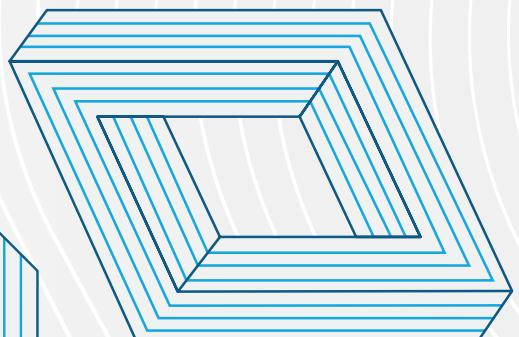
To the extent possible, we are prioritising rule change requests and other work to deliver the changes in these areas so customers can access safe, secure and reliable energy at the lowest possible cost. There are costs involved in transitioning a complex and interlinked system from one set of technologies to another. The AEMC focusses on minimising these costs to consumers. Often this goes hand in hand with minimising the risks faced by consumers so they don't end up paying for infrastructure that is not needed, or that is not useful in a future power system.



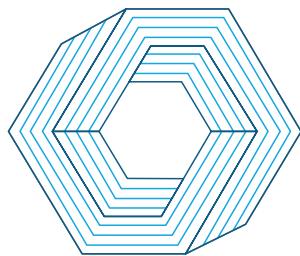
Customers are increasingly adopting small-scale solar and energy storage technologies.



The power system and market are increasingly underpinned by digital technologies that make it easier choose and control how, when and where power is delivered and used.



More variable demand from customers and more variable supply from generators makes forecasting a challenge and adds risk to operational and investment decisions.



The shift from large geographically concentrated to small geographically dispersed generation.

This requires us to rethink how we improve access to the grid so consumers get wind and solar power at lowest cost as the power system shifts.

This priority addresses the process by which generators access or connect to the transmission network, how much that costs and who pays for it.

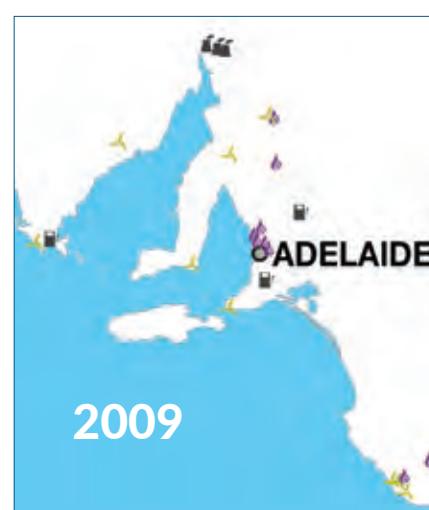
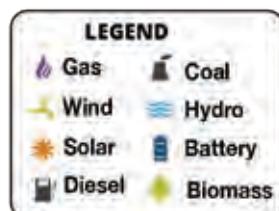
Our power system is moving from a small number of large generators concentrated in regions with access to coal - to a large number of small generators that are far more geographically dispersed and in places where the sun shines and the wind blows. Over the next 10 years, the amount of proposed new generation wanting to connect is roughly equal to the current size of the NEM (50 GW).

The work we are doing in this area is focussed on making sure there is adequate investment to build a bridge between new and old energy in the system. We are considering regulatory changes to underpin the right investment in the right place at the right time. If we don't reform generator access and transmission pricing consumers or taxpayers will bear the majority of transmission investment risk, and will foot the bill if transmission lines become 'roads to nowhere'.

The integrated system plan, completed by AEMO provides an important starting point for thinking about what the grid may look like in the future and prioritising the types of new transmission investments that might be needed between now and then to support new generators.

The AEMC is working with the other market bodies, AEMO, the AER and the Energy Security Board, to develop a framework that underpins an orderly power system transition under a range of future scenarios. We also significantly increased our engagement with the jurisdictions this year, as collaboration increased in response to the changing needs of the power system.

The changing generation mix – South Australia



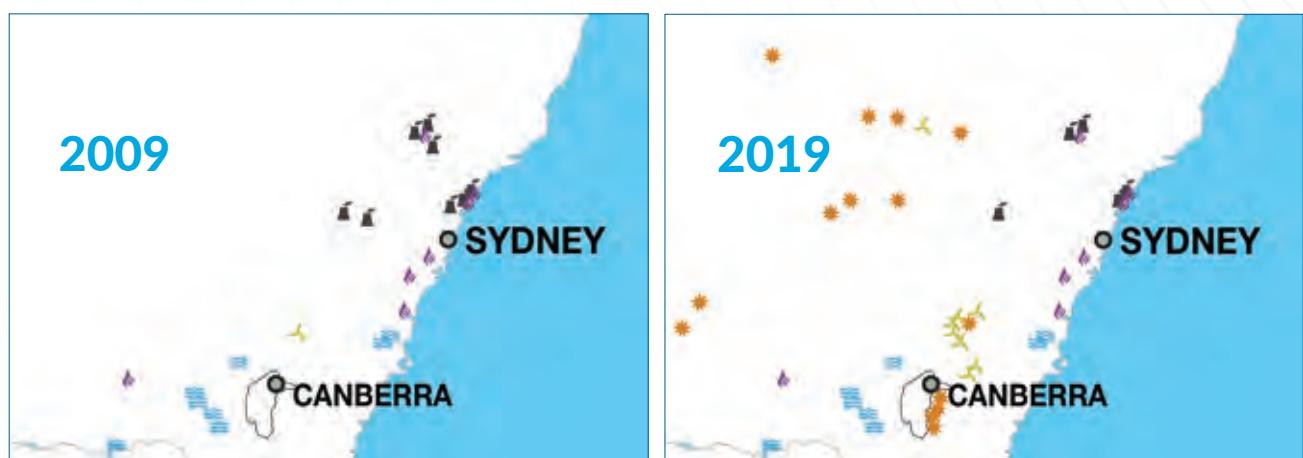
Key projects considering changes required in this priority area of reform include:

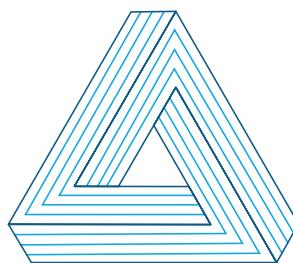
- Coordination of generation and transmission investment (COGATI) – access and charging review:** the shape of the power system is changing and this means the way transmission and generation investments are planned and paid for must also change. The AEMC has proposed reforms to the way generators access and pay for transmission infrastructure that aim to give new connecting generators more certainty for getting their energy into the grid and delivered to consumers and reduce the costs and risks for consumers when it comes to building and funding new transmission infrastructure.
- Transmission loss factors rule change requests:** when a participant is deciding whether and where to build a generator, one of the factors they consider is the loss factors that they will face when transporting their electricity to where it is used by customers. When you transport electricity across a network of poles and wires, some of it is lost as heat. The further the electricity has to travel, the more heat is lost. Losses also increase if lots of generators connect in the same area and transmission lines become more heavily loaded. Loss factors are applied to achieve economic dispatch. Two rule change requests currently under consideration seek to change the way loss factors are calculated and redistributed.



Animated graphics showing the changing generation mix for each Australian state and territory are available on the AEMC's website: www.aemc.gov.au

The changing generation mix – New South Wales





Power system services that were previously provided for free as a by-product of power generation are now not necessarily provided by new generation.

This requires us to fix the system security challenges that come with new technologies.

System security is the power system's capacity to continue operating within defined technical limits even if a major power system element, like a large generator or a major customer, disconnects from the system.

Power system security relates to the technical parameters of the power system such as voltage and frequency; the rate at which these parameters might change; and the ability of the system to withstand these changes.

Reform is needed in this area because the levels of system security services like inertia, frequency control and system strength are deteriorating as the generation mix changes. These services that were once provided as a 'by-product' of generating electricity from coal, gas and hydro generators are not being provided to the same extent by the new generators being added to the system.

Significant investment in new generation sources has been positive in that it has significantly reduced greenhouse gas emissions from the electricity sector. But non-synchronous generators like wind and solar have no or low inertia. Systems with lots of non-synchronous generation are weaker and harder to control. They have less time to recover from sudden equipment failures before frequency collapses.

A secure system is one which operates within a defined band of technical parameters constantly – or at least the vast majority of the time. There always needs to be sufficient levels of inertia and system strength to maintain frequency and voltage across the system. If these parameters are not within the appropriate bounds in real-time, the system may become unstable and the risk of widespread blackouts increases.

We are collaborating with the market operator, AEMO, to address these issues and have made significant changes to improve system security frameworks. This work remains an ongoing priority for the AEMC and we will be considering new ways to value and procure specific security services that need to be available in the future in quantities required to keep the system secure. The aim of regulatory changes will be to provide market and regulatory incentives for participants to invest in system security capabilities while maintaining appropriate safety net mechanisms to be used in emergencies.

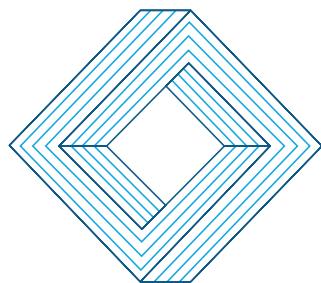
Key projects considering changes required in this priority area of reform include:

- Improving system performance reporting:** rule requiring AEMO to report weekly and quarterly on the frequency performance of the power system and the AER to report quarterly on frequency control ancillary services (FCAS) market outcomes.
- Investigation into intervention mechanisms:** a growing number of directions are being issued by AEMO to maintain system security. The increased use of directions can impact wholesale electricity prices, affect market signals to investors, and increase costs faced by consumers. The review recommended a number of changes to the interventions framework that will reduce market distortion and costs to consumers while maintaining efficient price signals and incentives for investors when AEMO intervenes in the market.
- Review of the system black event in SA in 2016:** this review started during the year under review to address any remaining systematic issues arising from the 2016 system black event drawing on work completed by AEMO and the AER following the event. Specifically the review will consider issues relating to contingency classification and the pre-event management of risks to power system security; system restoration following the black system event; market suspension, and arrangements to enhance power system resilience to high impact low probability events.
- Intervention pricing rule changes:** rules to improve various processes related to AEMO's interventions in the market, for example the way generators are compensated after a direction to help maintain system security or reliability.
- Primary frequency control rule changes:** developing mechanisms or arrangements to increase the provision of primary frequency response, to help manage frequency deterioration and support system security.
- System restart services rule changes:** updating the arrangements under which the services that 'jump start' the power grid after a system black are provided, including more rigorous testing processes to make sure these services will work as intended.



The AEMC is a member of the Queensland Government's stakeholder reference group for the Daintree electricity supply study. Government and community representatives are looking at options for the stand-alone power systems which are capable of preserving environmental and cultural priorities in the region.

Supporting the Daintree electricity supply study and stakeholder reference group: from the Queensland Department of Natural Resources, Mines and Energy, Catherine Cussen, Executive Director Analytics, Regulation and Commercial, Mitchel McCrystal, Director Regional Queensland Team, and Mahealani Delaney, Graduate Policy Officer with Andrew Truswell, Director, AEMC (second from right).



Customers are increasingly adopting small-scale solar and energy storage technologies.

This requires us to rethink how network infrastructure is used so customers and the grid can get the most out of these technologies.

Examples of distributed energy resources include rooftop solar PV units, natural gas turbines, microturbines, wind turbines, biomass generators, fuel cells, tri-generation units, battery storage, electric vehicles (EV) and EV chargers, and demand response applications.

With the right incentives and regulatory arrangements these distributed energy resources have the potential to contribute to the efficient operation of the grid and reduce costs for consumers.

Distributed energy resources (DER) have the potential to provide consumers with a range of benefits. Consumers who install distributed energy resources may be able to reduce the price they pay for electricity or may obtain improved reliability outcomes. DER may also help reduce the cost of power system augmentation reducing the overall cost of supply faced by all consumers, including people who don't have DER. These resources can contribute to power system security and may also help reduce the overall emissions intensity of the system by displacing other more emissions-intensive generation.

The AEMC is working with stakeholders to support the transformation of distribution network businesses into a platform for multiple services reflecting the different ways the grid is likely to be used by different types of customers. This includes considering what additional

information network businesses and others will require to most efficiently operate networks with high levels of distributed energy resources and maximise the benefits they can provide for customers, for example better understanding low voltage network constraints caused by energy exported by solar PV and battery systems.

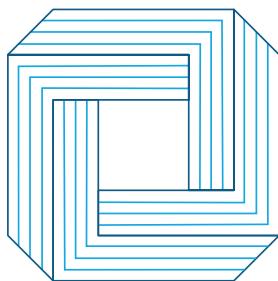
We are also working with stakeholders on potential changes to access and connection arrangements so they reflect the changing role of networks and the services they provide to customers who are using the network to both import and export energy, and most efficiently and fairly allocate and recover the costs of network capacity. This way, customers who own assets will get the most out of them and all customers will benefit from lower total system costs and reliability and security benefits.

Key projects considering changes required in this priority area of reform include:

- **Electricity network economic regulatory framework (ENERF) review:** in light of the significant growth in decentralised energy resources, the review examines what changes are needed to economic regulatory frameworks so they are robust, flexible and continue to support the efficient operation of the energy market in the long-term interest of consumers.
- **Regulatory sandboxes:** this part of the ENERF review is looking at the benefits of a regulatory sandbox toolkit to make it easier for businesses to develop and trial innovative energy technologies and business models. A regulatory sandbox is a framework within which participants can trial innovative concepts in the market under relaxed regulatory requirements at a smaller scale, on a time-limited basis and with appropriate safeguards in place.
- **Stand-alone power systems:** our stand-alone power systems review is developing proposed changes to the energy laws and rules to enable distributed energy resources to be used to provide individual power systems or micro-grids where it's more efficient than a traditional grid connection, e.g. in remote or high bushfire risk areas.



AEMC Executive General Manager Richard Owens and Senior Adviser Kate Reid at an AEMC stakeholder workshop on embedded networks held in Sydney. More than 200 stakeholders participated in the workshop which was webcast to include those who weren't able to attend in person.



The power system and market are increasingly underpinned by digital technologies that make it easier to choose and control how, when and where power is delivered and used.

We are embracing market frameworks to increase opportunities for people to use smart technologies to self-manage their energy and bills.

Digital technologies in homes and workplaces are creating significant opportunities for consumers to self-manage their energy in ways that were previously impossible.

Underpinned by data collected from smart meters, customers can now access and respond to personalised information about their energy use and costs.

Personalised portals, energy management systems and other digital platforms will give customers a way to buy, sell and use energy where, how and when they want it. Smart technologies mean households and businesses can take advantage of demand response – and that means the power system can avoid the cost of more spending on poles and wires to service new peaks in electricity demand for only a few hours a year.

For those involved in operating the power system, this granular data will underpin more efficient operational and investment decisions. Policy makers will also be able to use digital technologies to inform their policy decisions.

In this context the AEMC is designing new frameworks to leverage the digitalisation of energy supply to benefit customers and the power system.

Key projects considering changes required in this priority area of reform include:

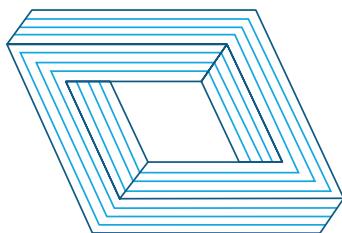
- **Demand response mechanism:** seeks to put demand response directly into the wholesale market to effectively ‘compete’ with generation to meet demand. Demand response as an alternative to peak, high cost generation, should mean lower peak wholesale prices. As part of the *Retail energy competition review 2020* we are considering the consumer protections framework required to ensure demand response can be rolled out to small customers.
- **Updating regulatory framework for embedded networks:** recommends changes to laws and rules to give the growing number of people in private networks the same protections as customers who are directly connected to the grid. Embedded networks can include innovative products and services such as on-site solar generation, battery storage and demand management services. These can offer important benefits to customers provided they are appropriately regulated and customers are fully informed when they sign up to these deals which can last for many years.
- **Advanced meters:** as part of our ongoing work on the implementation of the roll-out of advanced meters, we are assessing a rule change related to the process for installing advanced meters in apartment blocks and other multi-occupancy situations where metering providers have experienced practical challenges during the installation process. This will help make it quicker and cheaper for customers to obtain an advanced meter. We will also continue to monitor metering issues and commence a review of the implementation and effectiveness of the new rules in 2020.



AEMC Chief Executive Anne Pearson and Executive General Manager Tim Nelson appeared before the Fair Dinkum Power Inquiry's committee in March 2019 to give evidence relating to our submission on retail competition in the energy sector, consumer protections, and power system reliability and security.

"As an independent agency we offer advice to energy ministers without fear or favour. Appropriately, it's the political process that will determine policy targets and outcomes. The AEMC remains very focussed on putting the energy consumers first and taking care of consumer interests by making sure least cost and targeted solutions are found to address challenges ahead, whatever they may be."

From Anne Pearson's opening statement



More variable demand from customers and more variable supply from generators makes forecasting a challenge and adds risk to operational and investment decisions.

We are focussed on maintaining the link between financial incentives facing market participants and the physical needs of the system.

Electricity supply must match consumer demand at all times for the power system to stay reliable and secure.

There are two key features in today's NEM that are making it more challenging to match demand and supply and reward participants appropriately for their contribution to this.

- a) As the power system changes demand is becoming more variable (including due to digitalisation) and so is supply (more weather dependant generation). This makes it harder to predict and then balance demand and supply at all times. It also means the potential savings associated with avoided expenditure on energy infrastructure are likely to grow materially with the adoption of new technologies. This makes it hard for investors to identify investments that will be profitable over the long term.

- b) In recent years, some generators have been rewarded for their contribution to achieving environmental goals, not for being available when customers or the power system need electricity. This means the link between the physical needs of customers and the power system and financial reward for generators - purposefully put there to help balance supply and demand - has been broken.

Key projects considering changes required in this priority area of reform include:

- **Market making arrangements:** a number of initiatives are already underway to increase contract market liquidity – in particular the ASX's voluntary market making scheme and the market liquidity obligation which is part of the Retailer Reliability Obligation. To complement these, the AEMC has proposed additional monitoring and reporting processes in the market, including expanding the market monitoring role of the Australian Energy Regulator.
- **Short term forward market rule change:** we are examining whether the introduction of a short term forward market would incrementally improve the alignment of financial incentives with the physical needs of the system. By allowing the trading of electricity contracts closer to real time, the platform could give participants greater price certainty and more options to manage financial risks.



AEMC Chairman John Pierce was invited to address Australian Chamber of Commerce and Industry members at a series of energy forums around the country. The forums provided a valuable opportunity for us to hear directly from business leaders about the issues they're facing in the energy sector.
Pictured: John Pierce, Chairman, AEMC; Philippa Kelly, Chief Executive Officer, Large Format Retail Association.



“In this rapidly changing environment the knowledge and expertise of our stakeholders is invaluable”

ANNE PEARSON
CHIEF EXECUTIVE

AEMC EXECUTIVE GENERAL MANAGER DAVID FEENEY AND SENIOR ADVISER PRABPREET CALAIS (AT RIGHT) COLLABORATING ON THE IMPLEMENTATION OF FIVE MINUTE SETTLEMENT WITH AEMO STAKEHOLDER ENGAGEMENT SPECIALIST MONICA MORONA, AEMO CHIEF STRATEGY AND MARKETS OFFICER PETER GEERS AND AEMO ANALYST AUSTIN TAN.

OUR ORGANISATION

1063 846 28

STAKEHOLDER
MEETINGS

SUBMISSIONS

PUBLIC
FORUMS

About the AEMC

The Australian Energy Market Commission is the expert energy policy adviser to Australian governments. We were established under the Australian Energy Market Commission Establishment Act 2004 (SA) in 2005 and answer to the Ministers on the COAG Energy Council.

We make rules and conduct reviews under the National Electricity Law (NEL), the National Gas Law (NGL) and the National Energy Retail Law (NERL).

From 1 July 2016 the AEMC became the rule maker in the Northern Territory for parts of the National Electricity Rules. This follows the adoption of the National Electricity Law as a law of the Northern Territory in 2015.

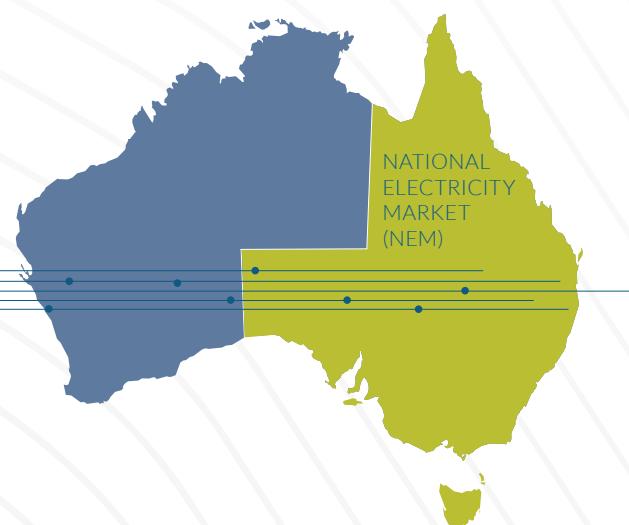
We are an independent, statutory body which delivers high quality and impartial advice to policy makers and makes changes to the energy market rules in response to requests from governments, industry, consumer groups and individuals.

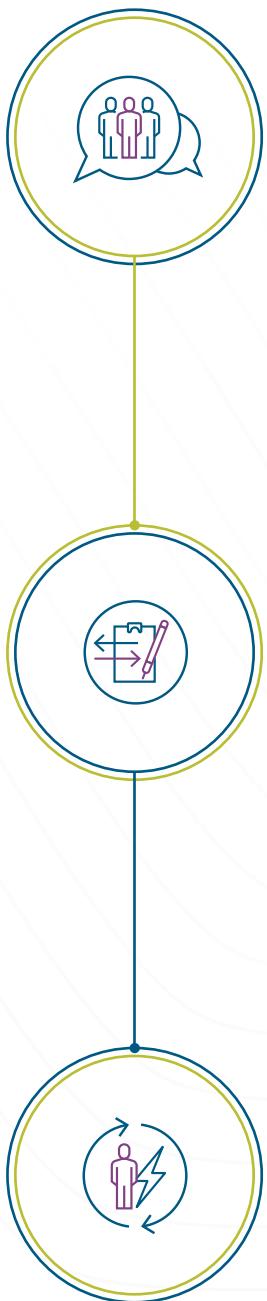
Our rules and advice on improvements to the design of regulatory and energy market arrangements are provided in accordance with the national energy objectives which go to serving the long-term interests of consumers. Many of our reviews arise from terms of reference provided by the nation's energy ministers, but we can also initiate our own reviews on matters related to the rules.

Our advice to governments informs their decisions and supports implementation of their energy policies. The AEMC's key task is to design legal frameworks that support the delivery of safe, secure, reliable energy at least cost for consumers. We are deeply consultative and are informed by evidence to support decision making. We make changes to the rules and review specific outcomes like energy retail competition or price, or particular sections of the regulatory framework, like gas pipeline regulation or transmission access. We do this for an industry that is underpinned by physics and engineering and we are guided by the national energy objectives, built on economic principles.

Governments are encouraged to use the AEMC as an expert resource for them, as well as submitting rule change requests where they believe the long-term interests of consumers can be better served through different regulatory arrangements.

Our scope – electricity and gas pipelines





The AEMC is an expert adviser to governments

We do this by undertaking reviews and providing advice on broad aspects of the energy markets. Our advice focusses on how to develop flexible and resilient markets that benefit consumers over time.

We also make and amend the rules that underpin the system and market

Our rules have the force of law. The Commission's ability to update the rules allows the energy sector to evolve as the world changes, without the need to coordinate law changes through nine different parliaments.

Consumers' interests are at the heart of everything we do

Our work sets the foundations for a market that drives industry to deliver safe, secure and reliable energy supply to consumers in a sustainable manner, over the long-term. We design regulatory frameworks to support consumers where markets cannot or are not delivering the outcomes consumers expect.

Overview of Australia's energy system

The national electricity market (NEM) is a set of physical and financial arrangements that underpin the production, buying, sale, purchase, transportation and consumption of electricity on the east coast of Australia.

Western Australia and the Northern Territory are not physically connected to the NEM and have their own electricity systems, although the Northern Territory has adopted parts of the national electricity market's rules framework. Some standalone electricity systems exist in all states to service remote areas.

For the power system to work, electricity must be consumed at exactly the same time that it is produced (unless it is stored as chemical, thermal or kinetic energy). To balance supply and

demand instantaneously, a variety of large and small generators produce electricity which is transported along high and low voltage networks to be consumed by households and businesses.

The vast majority of customers buy their electricity from a retailer. Energy retail markets provide the interface between retailers and their customers. Retail markets provide the frameworks to support retail competition, including allowing consumers to choose between competing retailers. A retailer buys the electricity that their customers consume from the wholesale market, packages up the fees and costs of supplying this electricity into an energy deal and bills the customer for the services involved.

The east coast gas market is an interconnected system that links all of Australia's states and territories except for Western Australia. Western Australia has a gas market that is operated in a similar way to the east coast market, but is physically separate.

A key difference between gas and electricity is that gas can be stored more easily than electricity. Gas producers extract gas (from conventional sources such as sandstone, or unconventional sources such as coal seams) and sell this wholesale gas to large gas users such as manufacturers and electricity generators. They also sell to gas retailers who in turn sell it on to household and business consumers. Pipeline businesses transport the gas from where it is produced, to where it is consumed.

Governments, independent energy market bodies and independent regulators each have specific roles and responsibilities within the regulatory arrangements that support the electricity and gas systems and markets.



Lily Mitchell, Senior Lawyer, AEMC, with two of our Graduate Advisers, Edward Hawkins (left) and Oliver Tridgell (right).

Guiding principles

The AEMC makes and amends electricity rules that:

- govern the operation of the NEM – the competitive wholesale electricity market and associated electricity system
- govern the economic regulation of transmission and distribution networks
- facilitate the provision of services to retail customers.

We also make rules that cover wholesale gas markets, economic regulation of natural gas pipelines and rules which relate to information disclosure and arbitration for non-covered pipelines.

Western Australia has adopted a modified version of the National Gas Law. Some AEMC amendments to the National Gas Law apply in Western Australia in relation to certain covered pipelines.

National energy objectives

We must have regard to the National Electricity Objective (NEO), the National Gas Objective (NGO), and the National Energy Retail Objective (NERO) – together, the national energy objectives – when making rules and conducting reviews under the NEL, NGL and NERL.

These three objectives focus all activities of the AEMC on what really matters: the long-term interests of consumers. The objectives were designed to accommodate change in the energy sector by focussing on customer outcomes.

The AEMC may only make a rule, or a recommendation, if it is satisfied that it will or is likely to contribute to the achievement of the relevant objective.

The National Electricity Objective (NEO)

“The objective of this Law is to promote efficient investment in, and efficient operation and use of, electricity services for the long-term interests of consumers of electricity with respect to:

- a) price, quality, safety, reliability and security of supply of electricity; and
- b) the reliability, safety and security of the national electricity system.”

The National Energy Retail Objective (NERO)

“The objective of this Law is to promote efficient investment in, and efficient operation and use of, energy services for the long-term interests of consumers of energy with respect to price, quality, safety, reliability and security of supply of energy.”

The National Gas Objective (NGO)

“The objective of this Law is to promote efficient investment in, and efficient operation and use of, natural gas services for the long-term interests of consumers of natural gas with respect to price, quality, safety, reliability and security of supply of natural gas.”

We routinely establish technical working groups and expert advisory groups in order to involve stakeholders in our most complex work and enable them to help test our thinking.

Guiding principles

Climate change and the National Electricity Objective

Climate change is a policy issue that has material impacts on the electricity and gas sectors. Australia, through the United Nations Framework Convention on Climate Change (UNFCCC) and Conference of the Parties (COP) process has agreed:

- warming should be limited to 2 degrees Celsius above pre-industrial levels with an aspiration to limit to 1.5 degrees
- the initial target for Australia is to reduce emissions by 26–28% relative to 2005 levels by 2030. These commitments are interrelated in relation to Australia's optimal climate change policy.

Climate change manifests through two broad types of risk:

- how the physical world is changing or likely to change as a result of climate change (adaptation risk)
- how policy makers, consumers and investors are responding, or are likely to respond, to the risks presented by climate change (mitigation risk).

Commission decision-making and climate change risks

The Commissioners make their decisions on rule changes with reference to the national energy objectives. These objectives do not specifically require the AEMC to have regard to the long-term interests of consumers with respect to climate change or the environment. Instead, the national energy objectives direct the AEMC to consider the achievement of economic efficiency in the long-term interests of consumers with respect to specified matters, being the price, quality, safety, reliability and security of the supply of energy or energy services.

However, in order to make decisions that meet the national energy objectives, the Commissioners consider whether their decisions are robust to any impacts on price, quality, safety, reliability and security of supply of energy or energy services, if these matters are impacted by mitigation or adaptation risk that manifests due to the issue of climate change.

Our mission, vision and values

Mission

To improve consumer outcomes from the strategic development of energy markets, through rules and advice.

Vision

Flexible and resilient markets that benefit consumers.

Values

The shared values of the AEMC are leadership, engagement and integrity. Each of us seeks to reflect those values in how we act and discharge our functions.

Leadership reflects our desire to foster and support informed debate on energy market development. We engage with governments, consumers and market participants to promote dialogue and understanding. We value different perspectives and welcome meaningful debate on energy market issues. We share our knowledge to help empower those who look to us for advice.

Engagement is at the core of everything we do. We aim to build and maintain strong relationships with stakeholders and we value their input to our rule making and strategic advice to governments. We focus on pursuing opportunities for consultation and expanding the range of organisations, groups and individuals with whom we collaborate.

Integrity speaks to the respect we have for our stakeholders, our high standards of impartiality, independence and the transparent processes that frame the work we undertake. An ethical, reliable and consistent approach is paramount in all our dealings with governments, industry and consumers and stakeholders' confidence in our established processes contributes to investment certainty.

What we do

Work program 2018-2019

90 projects

32 rule changes completed

26 rule changes underway

22 reviews and advice completed

10 reviews and advice underway

38 new rule requests

Reviews and advice

The AEMC undertakes reviews and advice to answer questions or investigate matters that are relatively broad in scope. Our final reports recommend actions that governments, industry participants or other parties could take to improve regulatory and market arrangements. Many of our reviews are underpinned by terms of reference from one or more energy ministers, or from the COAG Energy Council as a whole, but we can also initiate our own reviews on matters related to the rules. In conducting our reviews and preparing advice we consult widely on matters which are related to the progress of the COAG Energy Council's energy reform agenda.

We regularly review the state of competition in retail energy markets, the drivers of retail electricity prices, liquidity in gas markets, whether the economic regulatory framework is flexible enough to deal with increasing levels of distributed energy resources and drivers that could impact future transmission and generation investment. We have recently reviewed the frameworks in place to support reliability and system security, and provided advice to COAG Energy Council on the impacts of a default offer, customer transfers and options to reduce emissions from the energy sector.

During 2018-2019 we completed 19 reviews and made three formal submissions. A further 10 reviews were underway at 30 June 2019.

We received 296 written submissions from stakeholders in relation to reviews we worked on this year.

Sixty per cent of the reviews we completed this year were completed within the original terms of reference timelines. Extended timeframes were required in four instances to allow for additional stakeholder consultation, because of the timelines of inter-related projects or due to the increased scope or complexity of the issues involved.

We initiated 19 new reviews in 2018-2019. Four were rules requirements and one related to the Reliability Panel's administrative operations. Ten were requested by the COAG Energy Council or its members, one was requested by AEMO and one by the Reliability Panel. The remaining two reviews – on embedded networks, and intervention mechanisms and system strength – were initiated by the AEMC.

Rules

Requests for new rules or changes to the existing framework must come from outside the AEMC. Any government, regulatory body, organisation or individual can request a rule change and have it assessed against the national energy objectives.

The South Australian Minister also has the power to make rules on the recommendation of both the COAG Energy Council and the Energy Security Board.

Stakeholders shape the design and regulation of the market through their participation in the rule change process, and the extent of their involvement has a direct impact on the quality of market outcomes. Active and early engagement assists the AEMC to develop a comprehensive understanding of the potential impacts of each rule change and make well-informed decisions. A guide to the rule change process is available on our website. It includes information about how to submit a rule request or lodge a submission, and we provide further guidance when requested.

Between July 2018 and June 2019 we completed 32 rule changes. A further 26 were underway at 30 June 2019.

This year:

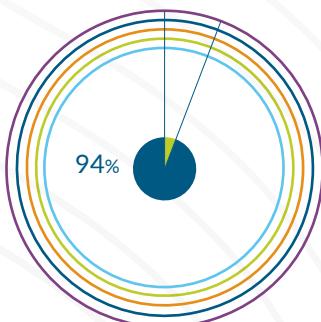
- stakeholders submitted 38 new rule change requests
- we received 550 written submissions from stakeholders in relation to open rule changes
- we made 13 rules amending the National Electricity Rules
- we made five rules amending the National Gas Rules
- we made three rules amending the National Energy Retail Rules
- we made three determinations not to make a rule in response to rule requests (one electricity; one gas; one retail)
- no rule change decisions were challenged by judicial review.

What we do

Our reasons for making (or not making) a rule, including how our decision serves the long-term interests of consumers, are set out in the final determination for each rule change that is published on our website. This rule making test contributes to greater regulatory predictability and transparency of the rule making process.

Our decisions are subject to judicial review. A number of other accountability mechanisms including reporting obligations under the *Australian Energy Market Commission Establishment Act 2004* (SA) and the COAG Energy Council's Statement of Expectations also apply to the AEMC's performance of its functions. From 10 July 2019, the AEMC's rule change process is also subject to COAG Regulation Impact Statement requirements (subject to certain exceptions).

Rule changes completed without extension after initiation



Rule making timeframes

We seek to complete rule change processes as quickly as possible while recognising the importance of balancing broad public consultation with achieving the right outcomes for consumers. The rule change process must be undertaken within the statutory timeframes required by the national energy laws.

The standard timeframe under the law for a rule change is approximately 130 working days (six months). We must start as soon as practicable after receiving a rule change request. To facilitate constructive consultation and encourage targeted feedback we start rule changes after an initial period of analysis and generally publish a consultation paper to facilitate stakeholder submissions. Before we start the statutory process we make practical decisions about whether the standard timeframes are achievable given the request's scope and competing reform priorities. We are able to extend the timeframe both at the start of a project and throughout the process in certain circumstances which are specified in the national energy laws.

None of the rule changes we completed in 2018-2019 were extended at initiation. We extended two rule change processes after initiation: *Generator technical performance standards* because of the complexity of issues raised by the rule change request and further issues raised by stakeholders during consultation, and *Enhancement of the reliability and emergency reserve trader* because of the complexity and difficulty (such as cost implications) of the issues being considered, and to allow time for advice from the Reliability Panel and AEMO's views on the appropriateness of the reliability standard to be considered.

Rule changes by category

The majority of rule changes follow the standard rule making process, but there are two exceptions: the expedited rule making process and the fast-track rule making process. The AEMC may expedite the rule making process if the request is for a non-controversial or urgent rule (as those terms are defined in the national energy laws).

Under the expedited process there is only one round of consultation on the rule change and no draft determination is made. A final determination must be made within eight weeks of the initiation of the rule change request. The rule making process can be fast tracked where there has been adequate previous public consultation on a proposed rule change by a market regulatory body, or if the request arises from an AEMC review.

Under the fast-track process there is no consultation period before the AEMC makes a draft rule determination. The fast-track process is nine weeks shorter than the standard process.

Standard

We completed 23 standard rule changes in the year under review. These rule changes were completed in an average of 131 working days, which was significantly faster than in previous years. We are aware of our stakeholders' desire for us to make rules more quickly. Where possible we identify efficiencies which can speed up our processes – including coordinating related matters to make it easier for stakeholders to engage with us – provided it does not compromise the thorough consultation and engagement that forms the basis for an open and robust decision-making process.

Expedited

We completed eight expedited rule changes in the year under review. All of these were expedited on the basis that they were non-controversial rule changes.

Fast-track

We completed one fast-track rule change in the year under review. The *Regulation of covered pipelines* rule change was eligible for a fast-track rule making process under the National Gas Law which meant it was completed more promptly after the publication of the associated review's final report.

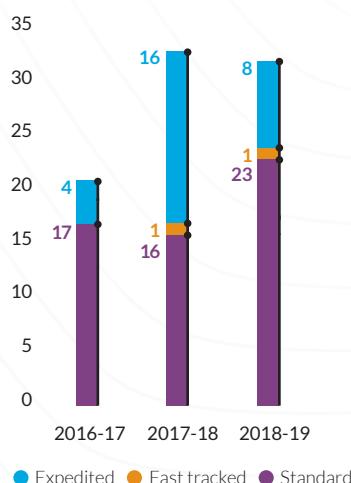
Timeliness

We received 38 new requests to change rules this year, compared with 28 last year. Our timeliness in initiating rule requests decreased slightly to 79%, but remained well above pre 2016-2017 levels. Our website includes a comprehensive forward calendar which contains all available information on publication dates for rule changes underway.

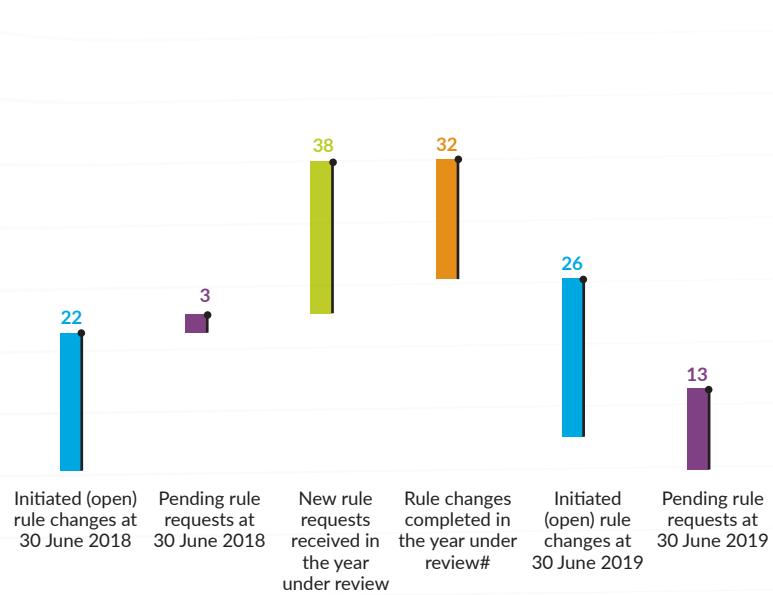
Rule change request proponents

Proponent	Requests in 2018-2019
AEMO	11
Australian Energy Council	4
Dr Kerry Schott AO	3
Victorian Minister for Energy Environment and Climate Change	3
Adani Renewables	2
Energy Networks Australia	2
ERM Power	2
AER	1
Chair of the Competitive Metering Industry Group	1
COAG Energy Council	1
ENGIE	1
Environmental Justice Australia, Institute for Energy Economics and Financial Analysis	1
Federal Minister for Energy	1
Northern Territory Treasurer	1
Dr Peter Sokolowski	1
PIAC, Total Environment Centre, the Australia Institute	1
Renewable Energy Revolution	1
South Australian Minister for Energy and Mining	1

Categories for completed electricity, gas and retail rule changes



Rule changes requested, initiated and completed*



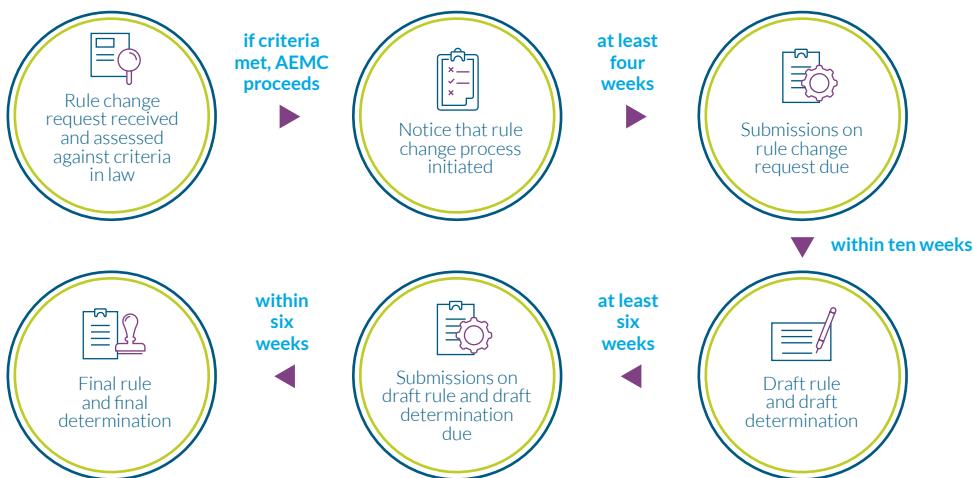
* Some single requests have resulted in the initiation of multiple related rule changes (electricity/gas/retail).

What we do

Managing rule making timeframes

Standard rule change process

Approximately 130 working days



Expedited rule change process

Approximately 30 working days

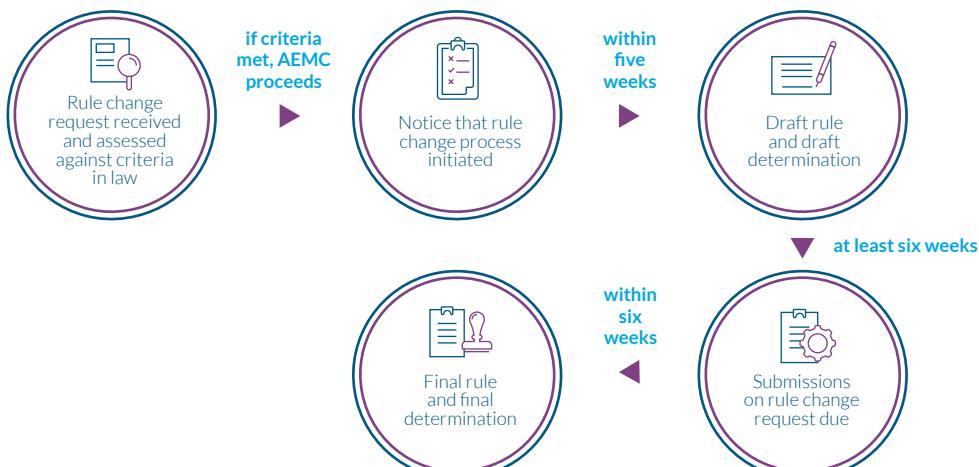
The Commission may expedite the rule making process if the request is for a non-controversial or urgent rule (as defined in the national energy laws).



Fast track rule change process

Approximately 85 working days

The rule making process can be fast tracked where there has been adequate previous public consultation on proposed rule changes by a market regulatory body, or if the request arises from an AEMC review.



Organisation charts

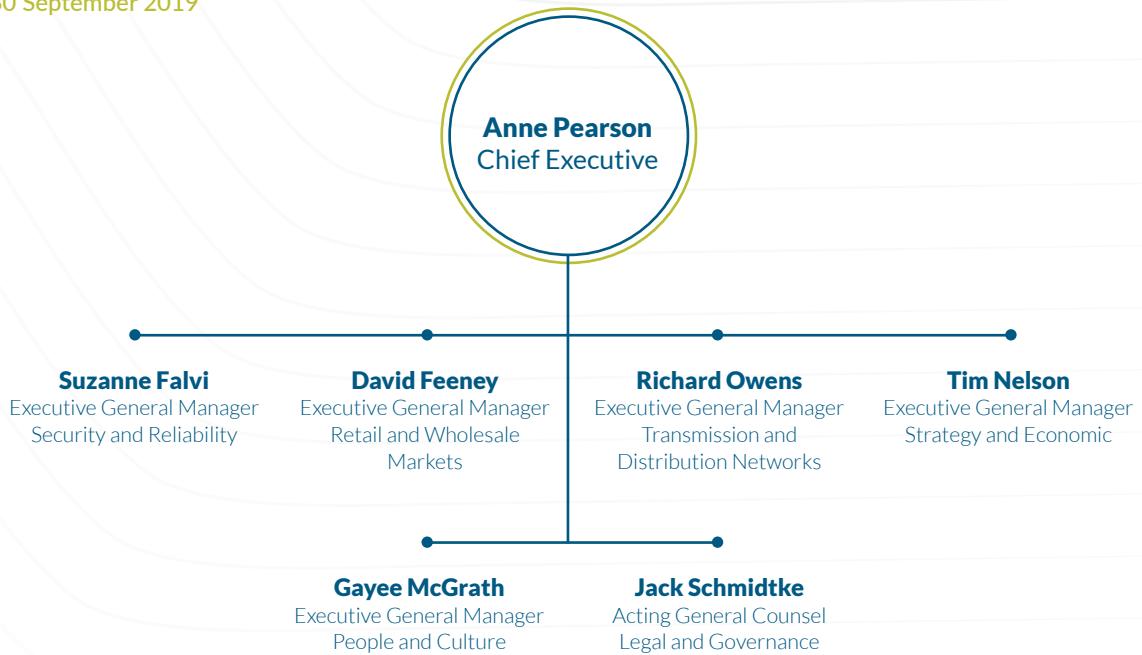
Commissioners

As at 30 September 2019



Executive leadership team

As at 30 September 2019



AEMC Commissioners



Left to right: Allison Warburton, Merryn York, John Pierce, Michelle Shepherd, Charles Popple.

AEMC Commissioners are appointed by Australia's state, territory and federal governments to make the rules under the national energy laws, and to advise governments on overall energy market development. A two-thirds majority of the COAG Energy Council is now required to confirm a new Commissioner appointment.

Our Commissioners bring a breadth of commercial, government and regulatory experience to their roles and hold advanced qualifications in engineering, law, commerce and economics.

Dr Brian Spalding retired as a Commissioner on 18 April 2019 and we recognise and thank him for his contribution to Australia's energy sector, the Australian Energy Market Commission and the Reliability Panel during his nine-year term as a Commissioner.

We welcome the appointment of our newest Commissioner Merryn York, joining the AEMC from 25 August 2019.

**JOHN PIERCE AO
Commissioner**

John Pierce was appointed as the Chairman of the AEMC on 2 June 2010 and re-appointed on 2 June 2015. He has worked at the most senior levels of policy development and advised ministers, cabinets and the Council of Australian Governments.

John is a former Secretary of the Federal Department of Resources, Energy and Tourism, a former Chairman of NSW Treasury Corp and served for more than a decade as Secretary of the New South Wales Treasury.

Prior to his time with Treasury, his energy business and operational experience was at Pacific Power and the Electricity Commission of NSW.

John is a member of the UNSW Australian School of Business (ASB) Advisory Council and Macquarie University's Industry Advisory Board, Department of Economics. John is currently Adjunct Professor in the Office of the Pro Vice Chancellor (Business), Griffith University.

From 2010 to 2012 he served as Panel Chair of the Electricity Supply Industry Expert Panel which conducted a comprehensive review of the development of Tasmania's electricity industry. John holds a Bachelor of Commerce with Honours from the University of New South Wales.

**CHARLES POPPLE
Commissioner**

Charles Popple was appointed as a part time Commissioner of the AEMC on 17 February 2018. He has spent more than four decades in the energy network sector. In the 1990s he played a significant role in the development of the national electricity market including reform of the network sector and the implementation of transmission system planning and pricing arrangements.

He has held management roles with Victorian Power Exchange, VENCorp, SPI PowerNet and SP AusNet. As a consultant, his focus was on energy markets and regulatory arrangements, with a view to achieving a balance between security, environmental challenges, and competitive pricing and products for energy consumers.

Charles has a Bachelor of Engineering from Monash University and a Master of Engineering Science in power system engineering from the University of Melbourne.

AEMC Commissioners

MICHELLE SHEPHERD Commissioner

Michelle Shepherd was appointed as a part time Commissioner of the AEMC on 11 June 2018. She has more than 20 years' experience in energy policy and regulation in both the private and public sectors and has been involved in energy market development across Australia.

Before her appointment she was the General Manager Regulatory and Government Affairs at Alinta Energy for six years where she was actively involved in energy policy reform and the commercial implementation of policy changes nationally.

Prior to Alinta Energy, Michelle spent nearly 10 years at AGL where she played a key role in the development of regulatory frameworks across Australia. She has also worked for the Australian Competition and Consumer Commission, UK Competition Commission and the Federal Department of Finance.

Michelle has strong board experience and a focus on governance. She was a board member of the YMCA WA for four years, serving as Vice President (Deputy Chair) for her final two years of service. Michelle also spent almost five years on the board of REMCo when it operated the WA gas market.

She holds a Bachelor of Commerce from Curtin University and a Bachelor of Applied Economics from Murdoch University and is a graduate of the Australian Institute of Company Directors.

ALLISON WARBURTON Commissioner

Allison Warburton was appointed as a part time Commissioner of the AEMC on 12 March 2018. She has worked in the energy sector for more than 20 years, advising energy users, governments and major corporations on energy policy and legislation.

Allison was previously a partner and national head of Minter Ellison's climate change and renewables practice, and has been involved in emissions reduction and clean energy projects, and advised on the renewable energy target, the Emissions Reduction Fund and other legislative schemes to report on and reduce emissions.

In 2016 she was appointed by the Queensland Government to its independent Renewable Energy Expert Panel to advise on credible pathways to achieving the government's renewable energy target.

She served as a non-executive director of Stanwell Corporation until January 2018 and previously advised the Australian Greenhouse Office on developing new laws to regulate geological carbon capture and storage.

Allison has a Bachelor of Arts and a Bachelor of Laws with Honours from the University of Queensland. She is a member of the Australian Institute of Company Directors and the Queensland Law Society.

MERRYN YORK Commissioner

Merryn York was appointed as a part time Commissioner of the AEMC on 25 August 2019. She has more than 30 years' experience in the Australian energy sector, predominantly with Queensland's electricity transmission network provider.

An electrical engineer by profession, Merryn has worked in all facets of transmission network service delivery including asset management, regulation, capital investment and governance, customer engagement and business development, and network planning and performance.

From 2011 to 2019 she served as Powerlink's Chief Executive, with a focus on leading the business in its transformation to align with the changing external environment and better meet customer expectations. In 2018 Merryn was appointed by the Queensland Government to its Queensland Energy Security Taskforce. She was a member of the AEMC Reliability Panel from 2013 for three years.

Merryn has also served as an Energy Networks Australia (ENA) board member, and chaired the ENA's Policy and Strategy Committee.

Merryn has a Bachelor of Engineering (Honours) in Electrical Engineering, a Master of Engineering Science, and a Graduate Certificate in Applied Law from the University of Queensland and is a graduate of the Australian Institute of Company Directors.

Executive leadership team



Left to right: David Feeney, Richard Owens, Suzanne Falvi, Gayee McGrath, Anne Pearson, Jack Schmidtke, Tim Nelson.

Executive leadership team

Our executive general managers set the agenda for the organisation and are accountable for its operating principles. They develop and implement the organisation's strategy and direct our rule-making and review functions.

As energy market transformation continues to result in a significantly increased workload for the AEMC, our leadership team's focus on the most effective use of available resources has enabled us to continue to meet commitments to our stakeholders.

This year we were pleased to welcome new Executive General Managers David Feeney and Tim Nelson who joined us from Telstra and AGL Energy respectively.

ANNE PEARSON
Chief Executive

Anne was appointed as Chief Executive of the AEMC in February 2016, bringing organisational leadership capabilities, and a breadth of industry and regulatory experience to the role.

Prior to her appointment she served as Senior Director, Market Development, with responsibility for directing reviews and rule determinations to facilitate the energy sector's adjustment to technological change and consumer responses in a carbon-sensitive world.

Before joining the AEMC in 2007, Anne's roles included Executive Manager of Retail Regulation at EnergyAustralia and corporate mergers and acquisitions at law firms Freehills and Deacons. She holds a Bachelor of Arts and a Bachelor of Law with Honours from the University of Sydney.

SUZANNE FALVI
**Executive General Manager,
Security and Reliability**

Suzanne leads the team responsible for reviews and rule changes relating to system security and reliability which have been a key focus for the energy market bodies in the past three years. She also leads the Reliability Panel secretariat.

She previously worked as a senior policy adviser for the ACT Government in their energy policy team, as in-house counsel in a solar technology research and development company, and for Minter Ellison specialising in competition, energy, administrative law and commercial litigation.

Suzanne holds a Bachelor of Economics, a Bachelor of Law with Honours and a Master of Laws in International Law from the Australian National University.

DAVID FEENEY
Executive General Manager, Retail and Wholesale Markets

David leads the team responsible for reviews and rule changes relating to the competitive parts of Australia's electricity and gas sectors. He joined the AEMC from Australia's largest telecommunications company, Telstra, where he performed a commercial development role and led the organisation's wholesale pricing strategy.

Prior to this David managed industry engagement and commercial access arrangements for NBN Co. He has previously held senior economist positions with NSW Treasury and the Productivity Commission.

He holds a Bachelor of Commerce from the University of Newcastle and a Master of Public Affairs from the University of Sydney.

The previous Executive General Manager in this position, Kris Funston, left the organisation in October 2018.

GAYEE MCGRATH
**Executive General Manager,
People and Culture**

Gayee has been working with the AEMC since 2016, and is currently the head of People and Culture, the team responsible for organisational culture, professional development and recruitment.

Her background is in executive management; she previously worked as Executive General Manager for CiEvents, a global strategic event management agency, and spent 16 years with Qantas in senior executive roles.

Gayee has qualifications in business studies, and certifications in leadership, executive management and human resources.

TIM NELSON**Executive General Manager, Strategy and Economic Analysis**

Tim leads the AEMC's Strategy and Economic Analysis division. Before joining the AEMC, he was Chief Economist at AGL Energy, one of Australia's largest energy businesses, where he led the company's public policy advocacy and its sustainability and ESG strategy.

He is a member of Westpac's Stakeholder Advisory Council and is on the Research Committee for the Centre for Policy Development.

Tim is an Associate Professor at Griffith University and is widely published in Australian and international peer-reviewed journals. He holds a PhD in Economics from the University of New England for which he earned a Chancellor's doctoral research medal, and a Bachelor of Economics with First Class Honours. Tim is also a fellow of the Governance Institute and a graduate of the Australian Institute of Company Directors.

RICHARD OWENS**Executive General Manager, Transmission and Distribution Networks**

Richard leads the AEMC team responsible for reviews and rule changes relating to the operation and economic regulation of electricity and gas networks. He was appointed an associate utilities commissioner for the Northern Territory Utilities Commission from 6 April 2018.

He was a member of the taskforce for the Finkel review into the future security of the national electricity market, and previously worked as a regulatory and competition lawyer at DLA Phillips Fox and Chapman Tripp, and as principal legal advisor for the New Zealand Ministry of Economic Development.

Richard holds a Bachelor of Law with First Class Honours from New Zealand's University of Canterbury, and a Master of Laws from the University of Leuven in Belgium.

JACK SCHMIDTKE**Acting General Counsel, Legal and Governance**

Jack leads the team which provides and coordinates support to the AEMC on legal, regulatory and governance matters, and drafts amendments to the national energy rules. In 2018 he was seconded to the Energy Security Board to work on key energy market reforms.

Jack has worked as a legal adviser in both the corporate and public sectors. Before joining the AEMC in 2014, he worked for Herbert Smith Freehills and DLA Piper in their corporate practice groups and as an in-house legal counsel, providing legal advice on regulatory matters, corporate governance, and public and private mergers and acquisitions. He was also an Associate to the Hon. Richard Conti, a Judge of the Federal Court of Australia.

Jack holds a Bachelor of Law with First Class Honours and a Bachelor of Arts from the University of Sydney.

The previous General Counsel in this position, Catriona Webster, left the organisation in July 2019.

Our economic analysis team has established a quarterly forum for investors and analysts providing a platform for discussion around issues relating to new investments in the energy sector.





RELIABILITY PANEL

Reliability Panel

The Reliability Panel is comprised of members who represent a range of participants in the national electricity market, including AEMO, generators, network businesses, consumers and large end users. It forms part of the AEMC's institutional arrangements and reports on the safety, security and reliability of the national electricity system.

The Panel determines standards and some of the guidelines used by AEMO and participants which help to maintain a secure and reliable power system for consumers. The Panel's work program is set by requirements in the rules and through terms of reference received from the AEMC.

The National Electricity Law sets out the key responsibilities of the Panel.

These include:

- to monitor, review and report on the safety, security and reliability of the national electricity system
- at the request of the AEMC, to provide advice in relation to the safety, security and reliability of the national electricity system.

The Reliability Panel completed four projects this year, including the formal process to appoint new Panel members, and has another three underway. The new frequency operating standard (FOS) will take effect in 2020, and the review's stage two final report made further improvements to the standard's structure and consistency.

The Panel's work this year has found that Australia's energy sector is cleaner and greener but the speed of structural change is putting growing pressure on power system security and reliability.

The Panel's annual market performance review identified that AEMO and transmission network service providers are finding it harder to manage the system in the face of fast-moving renewables penetration as consumers adopt rooftop solar in greater numbers and state, territory and federal governments all pursue their separate environmental policies.

We are starting to see falling system strength at the fringes of the grid in north Queensland, south-west NSW, north-west Victoria and continuing weakness in South Australia.

The Reliability Panel's *Annual market performance review 2018 (AMPR)* found a range of pressure points on the system including:

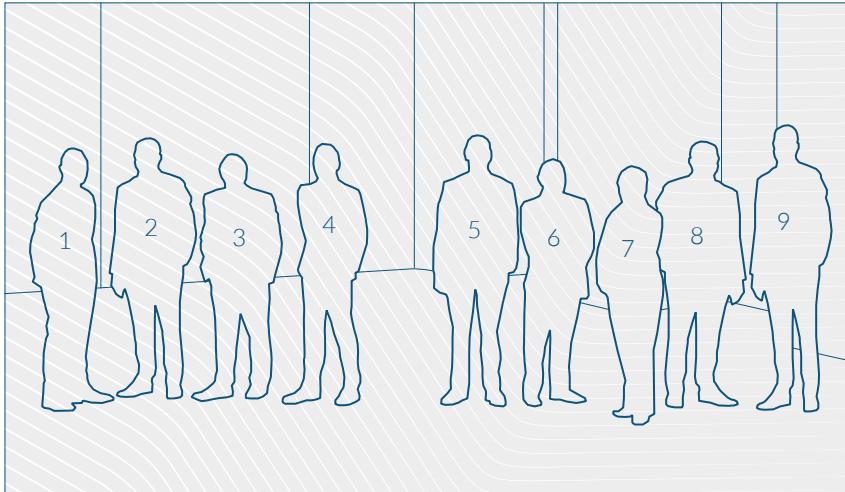
- upcoming retirement of thermal coal power stations across the eastern seaboard; and the general ageing of the thermal coal generation fleet
- deterioration of system strength, particularly in north Queensland, south-west NSW, north-west Victoria and South Australia
- network issues in Victoria which have been exacerbated by the decommissioning of the Hazelwood power station
- rising levels of electricity lost in transmission (marginal loss factors) due to increased generator connection in remote parts of the network
- impacts of accelerating take-up of solar PV on the grid.

The Panel noted there were 101 directions for synchronous generators (like gas) to turn on to keep the system stable, compared with only eight in 2016-2017. But the AEMC's new rules requiring networks to provide the minimum level of system strength determined by AEMO and synchronous condensers due to be commissioned in South Australia in 2020 should reduce the number of interventions required.

In April 2019, when the Panel's AMPR report was published, the AEMC also initiated an investigation into system strength and intervention mechanisms in the national electricity market to check-in on how the new framework is working in the context of accelerating changes in the generation mix and are seeking stakeholder feedback on the impact of the new rules.

Next steps: The revised frequency operating standard will take effect on 1 January 2020 to allow for affected parties to make arrangements to adjust to the revised requirements.

In its next annual market performance review the Panel intends to monitor and review the progress of the market bodies' security and reliability work program and considers whether they are likely to effectively address the issue of deteriorating frequency performance in the NEM.



Panel members at 30 June 2019

The AEMC is very fortunate that experts across the energy sector willingly dedicate their time to serve as members of the Reliability Panel.

We would like to express our gratitude to outgoing Chair of the Reliability Panel Brian Spalding and welcome AEMC Commissioner Charles Popple who has taken on this important role.

Three new Panel members were appointed in December 2018: Stephen Clark, Mark Collette and John Titchen.

CHARLES POPPLE³ Chair

Charles Popple, a Commissioner at the AEMC, has spent more than four decades in the energy network sector. In the 1990s he played a significant role in the development of the National Electricity Market including reform of the network sector and the implementation of transmission system planning and pricing arrangements. He has also held management roles with Victorian Power Exchange, VENCorp, SPI PowerNet and SP AusNet. As a consultant, his focus was on energy markets and regulatory arrangements, with a view to achieving a balance between security, environmental

challenges, and competitive pricing and products for energy consumers. Charles has a Bachelor of Engineering from Monash University and a Master of Engineering Science in power system engineering from the University of Melbourne.

TREVOR ARMSTRONG²

Trevor Armstrong, Ausgrid's Chief Operating Officer, is the distribution network service provider representative on the Panel. He joined Ausgrid as a cadet engineer in 1986 and has spent the last 30 years working in various roles including Executive General Manager System Planning & Regulation, and Executive General Manager Transmission & System Operations. He was appointed to the role of Ausgrid's Chief Operating Officer in 2012. Trevor holds a Bachelor of Electrical Engineering from the University of Technology Sydney, is a Fellow of the Institute of Engineers, a graduate of the Australian Institute of Company Directors and the Chairman of CIGRE.

STEPHEN CLARK⁸

Stephen Clark, Technical and Economic Leader - Project Marinus at TasNetworks, is the transmission network service provider representative on the Panel. Stephen is responsible for assessing the economic benefits of further interconnection between Tasmania and Victoria, as well as exploring the system performance issues associated with large amounts of inverter connected generation feeding an isolated power system. He holds a Bachelor of Engineering from the University of Tasmania.

MARK COLLETTE⁹

Mark Collette, Executive – Customer Business at EnergyAustralia, is the generator representative on the Panel. He has worked for EnergyAustralia since 2003 where he is responsible for all aspects of the company's wholesale operations and commodity trading activities. In former roles, Mark held executive responsibility for wholesale markets, corporate strategy and development, policy and government affairs and commercial and industrial sales. He holds a Bachelor of Business and a Bachelor of Engineering from RMIT, a Postgraduate Diploma in Economics from the University of Melbourne and is a graduate of the Australian Institute of Company Directors.

Mark recently resigned from the Reliability Panel. We thank him for his service.

KATHY DANAHER⁷

Kathy Danaher, Chief Financial Officer and Executive Director of Sun Metals, is a discretionary member of the Panel. She is responsible for wholesale electricity trading, hedging and transmission procurement for Sun Metals' zinc refinery, one of the largest single site consumers of electricity in Queensland. Ms Danaher holds a Bachelor of Science with Honours, a Bachelor of Business, and is a Certified Practicing Accountant.

Reliability Panel

GAVIN DUFFY⁴

Gavin Duffy is St Vincent de Paul Society, Victoria's Manager of Policy and Research. He represents end-use customers of electricity on the Panel. He has worked in the community welfare sector for more than 20 years. During this time Gavin Duffy has produced a number of reports focussing on the cost of living with particular emphasis on energy. He holds a Bachelor of Social Science from RMIT University.

CHRIS MURPHY⁶

Chris Murphy, Strategic Advisor at Meridian Energy and General Manager – Energy Market Interfaces for Telstra, is a discretionary member of the Panel. In previous roles in the electricity industry he has been responsible for distribution revenue, system-wide load forecasting, tariff development and regulatory affairs.

DAMIEN SANFORD¹

Damien Sanford is the Chief Operations Officer at AEMO, with responsibilities for AEMO's electricity and gas system operations and engineering teams. Prior to his current role, Damien led various operational functions within AEMO over the past decade, including most management roles in real-time electricity and gas operations. He holds a Bachelor of Business Management from Southern Cross University, is a member of the Australian Institute of Company Directors and is a former Australian Army Officer.

JOHN TITCHEN⁵

John Titchen, Managing Director of Goldwind Australia, is a discretionary member of the Panel. John established Goldwind Australia in 2009 and has since overseen the development of Goldwind Australia's portfolio of wind and solar generation. John has previously worked for the Electricity Commission of NSW, Pacific Power and Hydro Tasmania. John holds a Bachelor of Engineering from the University of Sydney and a Diploma from the Australian Institute of Company Directors.

RICHARD WRIGHTSON (Not pictured)

Richard Wrightson, Executive General Manager Wholesale Markets for AGL Energy, is the market customer representative on the Panel. The Wholesale Markets team is responsible for the procurement, trading and price risk management of AGL's wholesale electricity, gas, oil, carbon and renewable requirements. In his former roles, Richard worked on a wide range of issues including setting up retailing, risk management, power station dispatch and wholesale trading activities. He holds a Bachelor of Economics from Nottingham Trent University and a Diploma of Financial Services from AFMA.

We confidently face the future knowing that we have close working relationships with stakeholders who are committed to working with us to find robust and lasting solutions to the challenges we face.

Reliability Panel meetings 2018-2019

Member	Organisation and position	Market segment	Term expiry	Panel meetings	
				Eligible	Attended
Current members as at 30 June 2019					
Charles Popple (Chair)	Chair and AEMC Commissioner	AEMC	18 April 2020	6	6
Trevor Armstrong	Chief Operating Officer, Ausgrid	DNSPs	31 December 2019	11	11
Stephen Clark	Technical and Economic Leader - Project Marinus, TasNetworks	TNSPs	17 December 2021	5	4
Mark Collette	Executive – Customer Business, EnergyAustralia	Generators	17 December 2021	11	8
Kathy Danaher	Chief Financial Officer and Executive Director, Sun Metals	Discretionary	31 August 2021	9	8
Gavin Duffy	Manager Policy and Research, St Vincent de Paul Society, Victoria	End use customer of electricity	31 December 2019	11	11
John Titchen	Managing Director, Goldwind Australia	Discretionary	17 December 2021	5	5
Chris Murphy	Strategic Advisor, Meridian Energy and General Manager – Energy Market Interfaces, Telstra	Discretionary	31 December 2020	11	11
Damien Sanford	Executive General Manager, AEMO	AEMO	N/A	7	6
Richard Wrightson	Executive General Manager, Wholesale Markets, AGL Energy	Market customers	31 December 2020	11	7

Our stakeholders

Stakeholders are a fundamental part of energy reform. In Australia's energy market, stakeholders have a unique opportunity to shape the design and regulation of the market through participation in the rule change process, including by submitting rule change requests. In this rapidly changing environment, the knowledge and expertise of our stakeholders is invaluable and the effectiveness of our engagement with them determines the quality of the market and consumer outcomes we achieve.

Stakeholders play an essential part in the AEMC's unique approach to considering ideas, breaking down each component and assessing its effects, and where appropriate, implementing them. Active and early engagement helps us understand the potential impacts of our decisions and, in so doing, produce well-informed, high quality rule changes.

The AEMC is very fortunate in this regard; experts across the energy sector willingly dedicate their time to serve as members of the Reliability Panel; to be part of working and technical reference groups; to prepare detailed submissions on complex matters of policy and implementation; and to attend forums and workshops. Working with our stakeholders we consider how changes to one part of the market will affect other parts; how options that weren't available a relatively short time ago may now be possible because of technological advancement or market maturity and how regulatory frameworks can respond to new business models, technologies, and consumer needs.

Submitting a rule change request

A unique aspect of the energy market and regulatory change process in Australia is that anyone can submit a request to change the arrangements. Rules can be changed in response to requests submitted to us by individuals, consumer groups, industry or governments.

The AEMC's website includes step-by-step guidelines to assist individuals or organisations in preparing a rule change request. If a proponent is unsure about whether their request satisfies the relevant statutory requirements, we encourage them to speak with us for help in framing an appropriate response for submission.

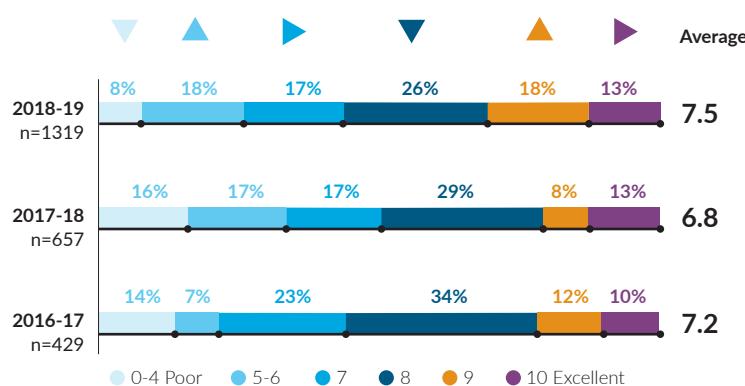
Stakeholder feedback on our consultation processes

As part of our commitment to identifying ways in which we can improve our engagement and communication, this year we invited 1319 stakeholders to participate in one or more quarterly online surveys about projects in which they were actively involved, for example by making a submission or attending a public forum.

The 16 projects we surveyed were selected to source feedback from a wide range of stakeholder types across different focus areas.

We were pleased to receive responses from 18 per cent of individuals who shared their opinions about how we interacted with them and provided valuable recommendations about steps we can take to enrich our stakeholder engagement.

Survey results: Overall ratings of AEMC's approach to consultation



The average rating this year was 7.5 (out of 10). Two-thirds of respondents rated the AEMC's overall approach to the review or rule change they participated in as quite good, very good or excellent (7 or more out of 10). We are pleased that stakeholders are aware of our efforts to continuously improve our engagement processes and we continue to take action on the feedback we receive, wherever possible.

Extent of engagement

Between July 2018 and June 2019, key AEMC staff participated in more than 1000 formal meetings and forums with governments, market bodies, industry participants and consumer groups. We held 28 of our own formal stakeholder forums and workshops, several of which were also webcast to encourage the participation of stakeholders who weren't available to attend in person.

Responding to a stakeholder request, we held a pre-final rule determination hearing in May 2019 for the *Northern gas pipeline – derogation from Part 23* rule change. Hearings serve a special purpose under the national energy laws. Only a few hearings have ever been conducted by the AEMC. Their purpose is for stakeholders to present views to AEMC Commissioners in person. Hearings are in addition to all other consultation stages carried out by the AEMC. We provided a transcript of the hearing for stakeholders who had not registered to attend in person, and accepted additional submissions on the draft determination. A final determination was published in July 2019, just after the close of the financial year period under review.

Engagement with international energy market bodies

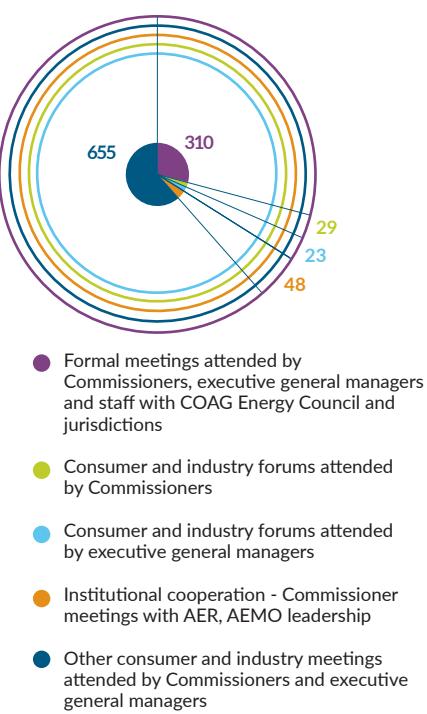
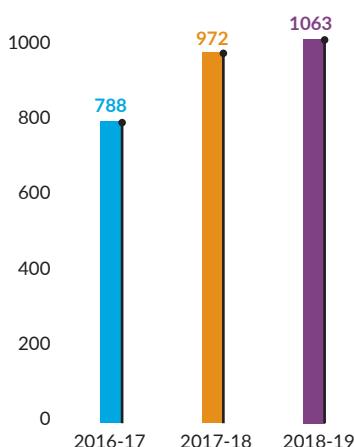
The AEMC actively engages with international energy market bodies that cooperate on global issues affecting energy markets.

Our Commissioners and executive leadership team meet regularly with representatives from the New Zealand Electricity Authority and Ofgem, the UK's Office of Gas and Electricity Markets.

International engagement enables us to benefit from the experience of others and provides a forum to share insights drawn from the high quality analytical work undertaken by Australia's own energy market institutions.

The AEMC is a member of the International Confederation of Energy Regulators (ICER) – an international body whose membership includes more than 200 regulatory authorities around the world. ICER's aim is to improve policy-makers' awareness and understanding of energy regulation and its role in addressing energy regulation issues in an international context. Through ICER, regulators exchange information about good practices in energy regulation. The AEMC representative on the ICER Steering Committee is our Chairman John Pierce.

Rising engagement



Our people

We're passionate about our contribution to the development of Australia's energy markets. That passion shows as we undertake careful analysis and engage meaningfully with our consumer, industry and government stakeholders to make decisions.

We take the quality of our work seriously. We're proud of the unrivalled experience we offer to our people and of the diverse perspectives that make up our organisation. By sharing our knowledge and experiences internally and with our stakeholders, we're working for the benefit of Australia's future.

Resourcing and succession planning

A key component of our people strategy is to attract and retain high calibre people with a unique skillset that enables us to execute our work program, effectively engage with stakeholders, and meet the challenges facing the energy sector.

This includes through continued investment in our graduate program. In the 2018-2019 financial year we recruited three graduates from economic and engineering disciplines. Our graduate program provides a pathway for graduates to form part of the AEMC's team of policy advisers and, more broadly, contribute to the energy sector's future workforce.

Career development

Providing career development opportunities for our people is an important component of our engagement and retention strategy. We invest in the development of our leadership pipeline including by providing experiential learning opportunities through acting appointments. To support

organisational agility we focus on expanding our breadth of skills by providing opportunities for lateral career moves, and work in cross-disciplinary teams in the delivery of our work program.

Building capabilities

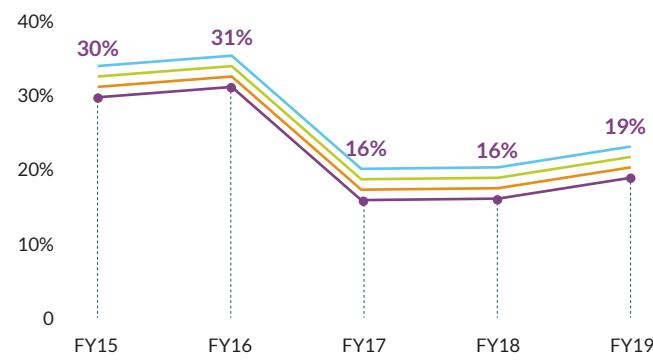
Our work utilises skills in project planning, analytical thinking, judgement, teamwork and communication. Over the past 12 months our learning and development program has continued to develop these key organisational competencies including by embedding a problem solving framework and advanced verbal and written communication skills development.

We have facilitated 40 short format learning sessions that leveraged our internal specialist capabilities and provided opportunities for our people to hear from industry and technical specialists, leaders and innovators from across the energy sector. We also encourage continuous learning by supporting further study in the field of economics through our scholarship program, and offer study assistance to employees completing relevant post graduate qualifications.

Total staff numbers



Staff turnover



Health and wellbeing

We take an integrated approach to managing health and wellbeing, based on three primary areas of focus:

- mechanisms for supporting positive lifestyle practices
- Consisting of: health promotion activities, lunch and learn information seminars, and access to an employee assistance program
- fostering a positive organisational culture
- Achieved through: open communication, opportunities for employee feedback and input including through our engagement survey, learning and development program, and inclusive leadership practices
- targeted health and safety management practices

Encompassing: the physical work environment, employee consultation through our health and safety committee, training, emergency response team, preventative risk management practices, program evaluation to ensure effectiveness, monitoring and reporting of the work environment, policies and procedures.

Aligned with our approach to managing risk, a key focus of our 2018-2019 program has been the introduction of an organisation-wide resilience program. The program was designed to support the psychological health of our people, and to develop healthy habits for coping with stress and challenges. The evidence based program has been well received by our people with further workshops scheduled for the next financial year.

Diversity

We are focussed on maintaining an inclusive culture where our differences are harnessed to create operational strengths. This includes providing the opportunity to work flexibly supported by enabling technology. Sixteen per cent of our people work part time. Ensuring gender diversity across the organisation is also important; as at 30 September 43 per cent of our executive leadership team are female. Supporting the needs of our return to work parents is also important, and we are proud of our 100 per cent return rate from parental leave.

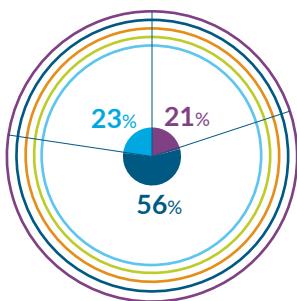
Executive leadership team



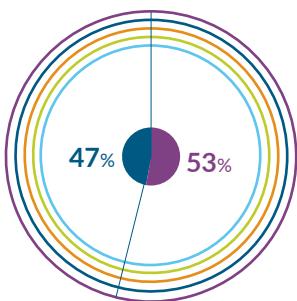
Commissioners



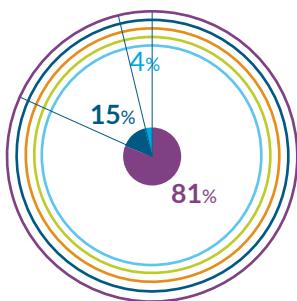
Staff by age group



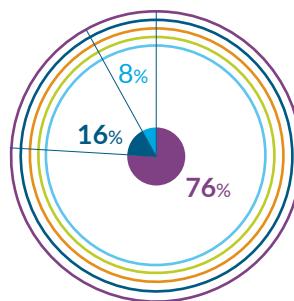
Staff by gender



Staff by role



Staff by status



● Up to 30 ● 31-45 ● 45+

● Female ● Male

● Staff directly associated with rules and market development project delivery

● Corporate support (includes administration, operations, human resources, finance and IT)

● Commissioners

Governance

Legislative framework

The AEMC is a body corporate established under South Australian law and its key functions and powers in relation to the making of national energy rules and market reviews are set out in the national energy laws (Part 4, National Electricity Law; Part 2 of Chapter 2, National Gas Law; Part 9, National Energy Retail Law) and the *Australian Energy Market Commission Establishment Act 2004* (SA).

In addition to its powers and functions under these laws, the AEMC is required to comply with a number of South Australian, New South Wales and Commonwealth laws relating to such matters as record keeping, information disclosure, financial reporting and employment related matters. For example, the AEMC complies with the *Fair Work Act 2009* (Cth), New South Wales work health and safety laws and South Australian laws such as the *Freedom of Information Act 1991* (SA), the *Public Finance and Audit Act 1987* (SA) and the *State Records Act 1997* (SA). From 10 July 2019, the AEMC's rule change process is also subject to COAG Regulation Impact Statement requirements (subject to certain exceptions).

Memoranda of understanding

To assist in the performance of its operations, the AEMC has entered into Memoranda of Understanding (MOU) with the following organisations:

- Australian Energy Regulator
- Australian Competition & Consumer Commission
- National Competition Council
- Australian Energy Market Operator
- Essential Services Commission of Victoria
- Independent Competition and Regulatory Commission of the ACT

- Office of the Tasmanian Economic Regulator
- Energy and Water Ombudsman New South Wales
- Energy and Water Ombudsman Queensland
- Energy and Water Ombudsman Victoria
- Energy and Water Ombudsman South Australia
- Energy Ombudsman Tasmania
- Australian Renewable Energy Agency

These MOUs set out principles to promote communication, coordination and information sharing between the AEMC and the other market bodies and jurisdictional regulators to contribute to the efficiency and effectiveness of energy markets and regulation in the long-term interests of consumers.

Corporate responsibility

AEMC Commissioners are appointed by Australia's state, territory and federal governments to make the rules under the national energy laws, and to advise governments on overall energy market development. A two-thirds majority of the COAG Energy Council is required to confirm a new Commissioner appointment.

The Commissioners are supported by the AEMC's executive leadership team and staff. Together they discharge rule making and market development roles in line with the AEMC's code of conduct which requires AEMC staff to act with fairness, honesty, impartiality and integrity in all our dealings.

Key performance indicators

The AEMC's statement of intent sets out how the AEMC will meet the COAG Energy Council's expectations through the AEMC's strategic priorities and work program. It also sets out the AEMC's deliverables and performance indicators to measure its performance in meeting those expectations. Our KPIs cover these areas:

- organisational development and budget management
- progress on the work program
- engagement with stakeholders.

Performance

This year the AEMC completed 32 rule changes and initiated 34 new requests, 79 per cent of which were initiated within the target timeframe of four months. Ninety-four per cent of rule changes were completed without extension after initiation.

Our turnover remained within the target range at 19 per cent, and our directors, executive general managers, Chief Executive and Commissioners participated in more than 1000 stakeholder meetings.

We completed 22 reviews/advice this year, with a further 10 underway at 30 June 2019. We completed sixty per cent of the reviews within the original specified timeframe. Changes in scope or the requirement to coordinate with other work underway affected the timing of several longer projects.

Stakeholder surveys

Our ongoing survey of stakeholder feedback on our consultation processes for individual rule and review projects continued throughout the year. This survey program started in 2014-2015 and is focussed on our striving for continual improvement. We initiated surveys for thirty per cent of completed projects in which we asked stakeholders to provide feedback and recommendations on our

consultation processes. Sixty-nine per cent of stakeholders rated our project consultation process as seven or higher (out of 10).

We also conducted our three-yearly stakeholder survey on overall organisational performance.

Two-thirds of stakeholders, 67%, believed our performance has improved over the last 12 months. Another 24% said our performance had at least stayed the same.

Face-to-face engagement was particularly valued in this respect and respondents welcomed the involvement of senior executives in engagement activities. Respondents who believed the AEMC has improved its overall engagement performance also noted the organisation has increased its output and is working smarter. They appreciated the organisation has been

finding new ways to deliver outcomes for industry and consumers, more quickly. Although, for some this is tempered by an acknowledgment that the sector still has a way to go.

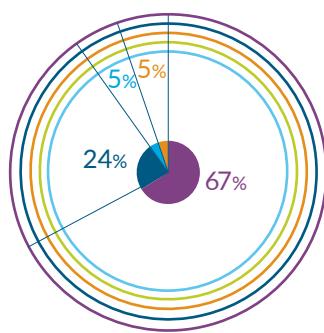
The Commission and executive leadership team

The AEMC's Commissioners exercise their statutory rule making and market development functions, subject to some delegations as explained below. Most of the functions relating to the management and day-to-day running of the organisation are the responsibility of the Chief Executive and the executive leadership team. The Commission retains the majority of the statutory rule making powers and market development functions, and is also responsible for the AEMC's strategic direction. The Chief Executive and executive leadership team have delegations in relation to some statutory decisions, including initiation of rule changes, and a range of other operational matters, including the employment of staff and engagement of consultants.

The Commissioners review the corporate governance framework of the organisation, overseeing the development of the AEMC's priority areas and business planning, and approving corporate development initiatives as proposed by the Chief Executive with the executive leadership team. The Commission holds monthly organisational meetings to review operational matters.

In terms of risk management and reporting, the Commissioners review the AEMC's budget, monitor its financial performance, and consider and approve the annual financial statements.

Stakeholder views on AEMC's overall engagement performance in 2018-2019

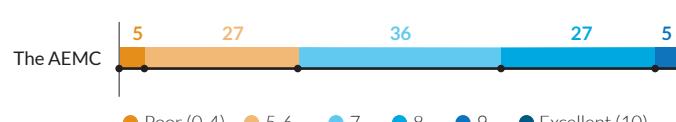


● Improved ● Stayed the same
● Declined ● NA

* Does not equal 100% due to rounding.

Overall reputation of the AEMC in 2018-2019 (%)

Over two-thirds of participants gave the AEMC a reputation score of 7 or more out of 10



Governance

Statement of Intent key performance indicators

Area	Measure	2016-2017	2017-2018	2018-2019
Organisation				
Budget management	Annual expenditure is within +/-% of initial budget	-1%	0.2%	-12.6%
Staff management	Staff turnover, on average, of between 10% and 20% per year (to reflect proactive management of underperformance and retention of key staff)	16%	16%	19%
Staff development	100% of staff have objectives and personal development plans which are reviewed annually	100%	100%	94%
Effective governance	Annual management review of risk assessment framework and implementation of appropriate internal audit work program	Completed	Completed	Completed
Work program				
Rule requests	75% of requests initiated within four months of receipt	89%	86%	79%
	100% of rule changes made within statutory timelines (including where extensions are requested)	100%	97%	100%
Rule change extensions	Proportion of rule change processes that are extended	67%	30%	6%
Rule change challenges	0% of rule change challenges are upheld	No challenges	No challenges	No challenges
Market reviews and advice	85% of reviews completed within original Terms of Reference timelines	80%	80%	60%
Efficient resource use	Proportion of FTE and total budget spend on rule making, reviews and advice	FTE: 82% Total budget: 84.6%	FTE: 83% Total budget: 76%	FTE: 85% Total budget: 78%
Stakeholder engagement				
COAG Energy Council and jurisdictions engagement	Number of formal meetings attended by Commissioners and/or staff with Council and/or jurisdictional leads	199	247	310
Commissioner forums	Number of consumer and industry forums attended by Commissioners	23	21	29
Staff-led forums	Number of consumer and industry forums attended by AEMC executive general managers	46	38	21
Institutional cooperation	Number of meetings between Commissioners and AEMO and AER leadership	28	57	48
Stakeholder satisfaction survey (survey every three years)	At least 7 out of 10 stakeholders satisfied with the AEMC's performance – giving a score of 7 or more out of 10	Survey due 2019	Survey due 2019	68% compared with 70% in FY16
Consultation process surveys	Develop project-specific stakeholder satisfaction surveys and ensure at least 25% of projects initiate survey upon project completion.	28% of completed projects	29% of completed projects	30% of completed projects

Commission statutory and governance meetings 2018-2019

Commissioner	Current term	Statutory meetings		Organisational meetings	
		Eligible	Attended	Eligible	Attended
John Pierce	2 June 2015 to 1 June 2020	32	24	12	11
Charles Popple	17 February 2018 to 16 February 2023	32	32	12	12
Michelle Shepherd	11 June 2018 to 10 June 2021	32	32	12	12
Brian Spalding	19 April 2016 to 18 April 2019	28	25	10	8
Allison Warburton	12 March 2018 to 11 March 2022	32	30	12	11

Conflicts of interest

Under Section 22 of the *Australian Energy Market Commission Establishment Act 2004* (SA), Commissioners must disclose any direct or indirect conflicts of interest in any matter the AEMC is considering. These disclosures are formally minuted and published on the AEMC website. The following declarations of interest were made by Commissioners in 2018-2019.

John Pierce is appointed in a full time capacity and does not consider that his commitments give rise to any conflicts that require management. Mr Pierce is currently a member of the UNSW Australian School of Business Advisory Council, and has been appointed as Adjunct Professor in the Office of the Pro Vice Chancellor (Business), Griffith University. He is also a board member of the Regulatory Policy Institute Advisory Board and the Department of Economics Industry Advisory Board at Macquarie University.

Charles Popple is appointed in a part time capacity and does not consider that he has any current commitments or interests that give rise to conflicts that require management.

Michelle Shepherd is appointed in a part time capacity and does not consider that she has any current commitments or interests that give rise to conflicts that require management.

Allison Warburton is appointed in a part time capacity. She was a partner of law firm Minter Ellison prior to her appointment as a Commissioner and held a pecuniary interest in Minter Ellison Administration Pty Ltd for the purposes of enabling a distribution from the firm's service entity for the 2017-2018 year. In order to manage any perception of conflict, Ms Warburton absented herself from any decision of the AEMC to appoint external legal counsel to provide advice or representation on any matter until the relevant interest was redeemed on 22 February 2019.

Brian Spalding was appointed in a part time capacity until 18 April 2019. He was a member of the Energy Saving Scheme Committee and the Energy Networks Regulation Committee of the Independent Pricing and Regulatory Tribunal, and an advisor on the New South Wales Energy Security Taskforce. He made the following statement about the arrangements he had put in place to manage (perceived or actual) conflicts of interest:

- Any potential involvement on my part in matters relating to the energy sector, which are not within the jurisdiction of the AEMC, would be disclosed to the Chairman of the AEMC before being involved in such matters to ensure no potential conflict may arise.
- Confidential information obtained in my capacity as a Commissioner will not be disclosed or used for purposes other than the proper purposes.

Governance

The Retail energy competition review 2019 showed a pleasing shift in market behaviour with retailers now moving towards simpler, more stable priced deals and away from the dodgy discounts and confusing offers that mislead customers.

Audit and risk management

Risk management is a fundamental component of managing our operations. Our processes to identify, assess and manage risk include:

- Audit and Risk Management Committee monitoring of the overall risk management framework, financial reporting processes, processes for compliance, performance of auditors and oversight of the audit program
- a broad based risk assessment process which is used to develop a rolling three-year internal audit plan and to inform risk management activities
- a risk appetite statement which is shared with all AEMC staff
- the corporate planning processes which prioritise actions based on assessed risks
- the identification and management of compliance areas on a functional basis with legal support where necessary
- the project control framework which is used for all rule change and review projects. This includes the creation of a risk register, where relevant, and the active management of identified risks.

Audit and risk management committee

The AEMC's Audit and Risk Management Committee is comprised of:

- Jim Mitchell – independent Chairman
- Allison Warburton – AEMC Commissioner and Committee member
- Jane Byrne – independent Committee member

Mr Mitchell currently holds appointments as the independent Chair of the Audit and Risk Committee for a range of government agencies including the New South Wales Department of Education. His former roles include Deputy Auditor-General of the Audit Office of New South Wales for seven years, Assistant Director General for the Department of Local Government and probity adviser to the Director General at the New South Wales Department of Transport.

Ms Byrne is a financial services professional with 30 years of experience at senior executive level in governance and risk management in relation to trusts, superannuation, and wealth management. She is

Commission Audit and Risk Management Committee membership and meetings 2018-2019

In addition to face to face meetings the audit committee dealt with a number of matters out of session

Members	Committee term	Eligible	Attended
Jim Mitchell (Committee Chair)	From 1 July 2015	3	3
Jane Byrne	From 1 July 2015	3	3
Allison Warburton	From 23 April 2018	3	3

currently a non-executive director of the St Patrick's College Strathfield Advisory Board, Chair of the College's Risk Management Committee, and a member of the Finance Council of the Sisters of the Good Samaritan. Ms Byrne was Company Secretary of Pillar Administration, Australia's third largest superannuation fund administrator, for ten years and currently consults on governance and risk with PFS Consulting.

Fraud prevention

Within our risk management framework, procedures are in place to help identify sources of potential fraud or corrupt practices, prevent occurrences, and investigate and take appropriate action on reported breaches. No instances of fraud were identified during the year under review.

Business continuity

The objective of the AEMC's business continuity and disaster recovery plan is to ensure that business processes are robust and able to withstand minor business interruptions and to ensure the ongoing ability of the AEMC to continue its operations in the event of a major business interruption. The AEMC did not suffer any major business interruptions in the year under review.

Freedom of information

The AEMC is subject to the *Freedom of Information Act 1991* (SA). There were no freedom of information requests made to the AEMC in 2018-2019. All documents we publish regarding our rule making, reviews, advice and all versions of the National Electricity Rules, National Gas Rules and National Energy Retail Rules are on our website at www.aemc.gov.au. They can also be inspected at our offices. A request under the *Freedom of Information Act 1991* (SA) is not required to inspect them.



LEFT TO RIGHT: EWON DEPUTY OMBUDSMAN HELEN FORD; AEMC DIRECTOR,
ED CHAN; EWON INVESTIGATIONS OFFICER, MARIJA DURIC; AEMC ADVISOR,
JESS BODDINGTON; EWON MANAGER POLICY AND RESEARCH, RORY
CAMPBELL; EWON MANAGER INVESTIGATIONS, ADRIAN BORCHOK

RULES AND REVIEWS

Table A

Electricity rules made by the AEMC in 2018-2019

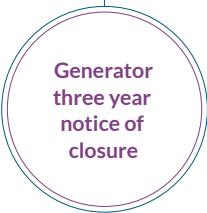
Electricity rule made	Benefit/impact	
 Establishing values of customer reliability	<p>This rule makes the AER responsible for determining values of customer reliability. Knowing the value customers place on having reliable electricity supports efficient investments in generation and network infrastructure.</p> <p>This new role for the AER goes to the heart of the need to balance delivery of secure and reliable power supplies while making sure consumers don't pay more than necessary.</p> <p>Making the AER the single body responsible for calculating values of customer reliability will remove unnecessary duplication and improve our ongoing understanding of the value customers place on reliable electricity supply and the price they are willing to pay for it.</p> <p>Next steps: The AER will develop a methodology to calculate values of customer reliability, and produce the first estimates under that methodology by 31 December 2019.</p>	<p>Consolidation Rule 2018 No. 8 (NER version 111 and NT NER version 25)</p> <p>Date made 5 Jul 2018</p> <p>Commenced 13 Jul 2018</p> <p>Proponent COAG Energy Council</p> <p>Category Expedited</p>
 Register of distributed energy resources	<p>This new rule established a national register of small scale batteries, rooftop solar and other distributed energy resources. The register will give network businesses and AEMO visibility of where distributed energy resources are connected to help in planning and operating the power system as it transforms.</p> <p>The register will primarily be compiled using data collected by network businesses through existing processes. The final rule also allows AEMO to incorporate any other relevant data it receives, for instance from the Clean Energy Regulator or state safety regulators, where appropriate.</p> <p>Next steps: AEMO published DER register information guidelines on 31 May 2019. The guidelines apply to NSPs after 1 September 2019 and NSPs must provide the required information to AEMO by 1 December 2019.</p>	<p>Consolidation Rule 2018 No. 9 (NER version 112 and NT NER version 26; Schedules 1-3 will be consolidated into new versions of the NER and NT NER on commencement)</p> <p>Date made 13 Sep 2018</p> <p>Commenced 18 Sep 2018; 1 Dec 2019</p> <p>Proponent COAG Energy Council</p> <p>Category Standard</p>

Electricity rule made	Benefit/impact	
	<p>Generator technical performance standards</p> <p>The AEMC has made significant changes to technical performance standards for generators seeking to connect to the national electricity grid, and the process for negotiating those standards.</p> <p>Generators play an important role in helping AEMO and network businesses keep the lights on. This can include having the technical capability to control their voltage and frequency, and the ability to stay connected even when there is a major disturbance to the power system.</p> <p>A large number of new generators like wind and solar farms are set to connect to the grid in coming years. The new rules provide a flexible approach to setting the required technical standards so these new generators can join the power system at the lowest possible cost while maintaining system security.</p> <p>This major piece of work is the result of a rule change request from AEMO and months of cross-industry collaboration. A team of technical experts comprising AEMO, generators, network businesses and power systems engineers worked with the AEMC throughout the project to systematically review each technical standard.</p> <p>Under the new rules, a connecting generator's technical requirements are matched to local power system needs rather than a one-size-fits-all approach. This is key to keeping costs down for consumers.</p> <p>The new rules also tighten some standards where needed and set clearer roles and responsibilities so all parties – generators, networks and AEMO – know what they have to do when negotiating the required standards for a particular region.</p> <p>Next steps: The Reliability Panel is conducting a review of the template for generator compliance programs which is scheduled for completion by the end of 2019.</p>	<p>Consolidation Rule 2018 No. 10 (NER version 113 and NT NER version 27)</p> <p>Date made 27 Sep 2018</p> <p>Commenced 5 Oct 2018</p> <p>Proponent AEMO</p> <p>Category Standard</p>
	<p>Minor rule changes are made annually, or as needed, to correct minor errors and make non-material changes to the rules. They improve the quality of the rules in terms of accuracy and consistency.</p>	<p>Consolidation Rule 2018 No. 11 (NER version 114 and NT NER version 28)</p> <p>Date made 8 Nov 2018</p> <p>Commenced 9 Nov 2018</p> <p>Proponent AEMC</p> <p>Category Expedited</p>

RULES AND REVIEWS

Table A

Electricity rules made by the AEMC in 2018-2019

Electricity rule made	Benefit/impact	
	<p>Unexpected generator exits can lead to a sudden increase in wholesale electricity prices. This rule minimises the risk of price shock by requiring large electricity generators to provide at least three years' notice before closing. It is based on one of the Finkel Panel review's recommendations and is part of the AEMC's broader system security and reliability work program.</p> <p>AEMO considers and includes information about generator exits in its long-term Electricity Statement of Opportunities forecasts and will also publish expected closure dates on its website.</p> <p>Access to information about generator exits will help market participants respond to possible future shortfalls in electricity generation, for example by building replacement capacity.</p> <p>The AEMC has recommended new civil penalties, enforced by the AER, if generators fail to comply with the new obligations.</p> <p>Next steps: The AER released a guideline on 29 August 2019 specifying how generators should provide information about closures to AEMO, and when exemptions may apply.</p>	<p>Consolidation Rule 2018 No. 12 (NER version 114 and NT NER version 28)</p> <p>Date made 8 Nov 2018</p> <p>Commenced 8 Nov 2018</p> <p>Proponent Dr Kerry Schott AO</p> <p>Category Standard</p>
	<p>AEMO suspends the spot market when the market cannot operate as normal, for example, if there is no electricity supply due to a black system event. Market suspension has happened twice in the history of the national electricity market.</p> <p>This final rule established a new compensation framework to apply during market suspension events when the market suspension pricing schedule (MSPS) is in operation.</p> <p>Its aim is to allow participants who incur losses during such periods to recover their direct costs, while also managing the impact on consumers who ultimately bear the cost of compensation payments.</p> <p>Next steps: When the five minute settlement rule commences on 1 July 2021, the MSPS framework will be updated to bring it into line with new settlement procedures.</p>	<p>Consolidation Rule 2018 No. 13 (Schedule 3 - NER version 115 and NT NER version 29; Schedule 1 - NER version 117 and NT NER version 31; Schedule 2 to be consolidated in new versions of the NER and NT NER on commencement)</p> <p>Date made 15 Nov 2018</p> <p>Commenced 22 Nov 2018; 20 Dec 2018; 1 Jul 2021</p> <p>Proponent AEMO</p> <p>Category Standard</p>

Electricity rule made	Benefit/impact	
 Global settlement and market reconciliation	<p>AEMO is responsible for settlement in the national electricity market – making sure that market generators are paid for the energy they provide and retailers pay for the energy their customers use.</p> <p>This new rule moves settlement of the demand side of the wholesale electricity market to a global settlement framework. This is a change from the settlements by difference approach which has been in place since the start of the national electricity market.</p> <p>Moving to global settlements will improve transparency and accuracy of settlements, resulting in decreased costs of resolving disputes, and provide better incentives for retailers to minimise electricity theft and other causes of unaccounted for energy. Unaccounted for energy will be allocated to all retailers within each local area based on customer consumption – a more equal platform for competition.</p> <p>Next steps: AEMO must consult, amend and publish its relevant procedures by 1 December 2019. The global settlement soft start will commence on 1 July 2021 at the same time as five minute settlement. Other changes take effect in February 2022.</p>	<p>Consolidation Rule 2018 No. 14 (Schedule 5 - NER version 116 and NT NER version 30; Schedules 1-4 to be consolidated in new versions of the NER and NT NER on commencement)</p> <p>Date made 6 Dec 2018</p> <p>Commenced 13 Dec 2018; 6 Feb 2022</p> <p>Proponent AEMO</p> <p>Category Standard</p>
 Metering installation timeframes	<p>The AEMC has made a rule that gives customers more control over when their retailer installs or upgrades their electricity meter.</p> <p>Smart meters help get the most out of new technologies like rooftop solar, storage and energy efficient appliances. They can also give information about energy consumed by smart appliances – making it easier for consumers to move their use to off-peak times if they choose.</p> <p>Retailers will now have to install new, replacement or upgraded smart meters at a time agreed with customers or, if agreement cannot be reached, within a specified timeframe.</p> <p>More than 500,000 smart meters have been installed in NSW, SA, Qld, ACT and Tasmania since the AEMC's 2015 competition in metering rule change, but in some cases retailers have been too slow to have new meters installed.</p> <p>The rules also place new obligations on network businesses to notify retailers as soon as they have finished connection work for a customer so the meter can be installed promptly.</p> <p>The AEMC has recommended the COAG Energy Council approve new civil penalties to protect customers if retailers or network businesses do not meet these new deadlines</p> <p>Next steps: Regulators, ombudsman schemes and state governments will continue to work with retailers and distribution businesses to help customers get their new meters quickly.</p>	<p>Consolidation Rule 2018 No. 15 (NER version 119 and NT NER version 32)</p> <p>Date made 6 Dec 2018</p> <p>Commenced 1 Feb 2019</p> <p>Proponent Australian Energy Council, Federal Minister for the Environment and Energy</p> <p>Category Standard</p>

Table A

Electricity rules made by the AEMC in 2018-2019

Electricity rule made	Benefit/impact	Consolidation	Date made	Commenced	Proponent	Category
	<p>Under the AEMC's competition in metering rules which started in December 2017, all new and replacement meters for small customers must be smart meters.</p> <p>At the time of installation, customers are entitled to request that the smart meter's communications are deactivated which means that the meter can no longer be read remotely or provide smart functions like demand response.</p> <p>This new rule makes provision for customers to request their metering coordinator to deactivate a smart meter's communications even when it has already been installed. Accepting a customer's objection to the use of a smart meter is at the discretion of the metering coordinator.</p>	Rule 2019 No. 1 (NER version 123)	21 Mar 2019	1 July 2019	Australian Energy Council	Standard
	<p>The AEMC has made a rule to streamline the regulatory process for three priority projects identified in AEMO's Integrated System Plan (ISP). The plan has a list of priority transmission projects which includes minor upgrades to the interconnectors joining QLD-NSW and VIC-NSW, and a new interconnector between South Australia and New South Wales (Project EnergyConnect).</p> <p>The new rules allow the AER to concurrently consider regulatory processes that apply to the three projects after the completion of the cost-benefit assessment, known as the RIT-T. The final rule does not remove or change any of the regulatory steps for these projects other than to allow them to run concurrently, and the AER cannot complete a step until the previous step has been completed.</p> <p>These changes are part of the AEMC's recommended reforms to the transmission framework set out in the final report for the <i>Coordination of generation and transmission investment review</i>, published in December 2018. In progressing the remainder of these reforms to better coordinate investment in transmission infrastructure and new generation, the AEMC is examining ways that market participants can more appropriately bear the risk of transmission investment, rather than consumers.</p> <p>The final rule improves the likelihood that the interconnector upgrades and Project EnergyConnect will be delivered within the time frames required to support reliability, security and efficient outcomes for consumers in the national electricity market.</p>	Rule 2019 No. 2 (NER version 120 and NT version 34)	4 Apr 2019	11 Apr 2019	Dr Kerry Schott AO	Expedited

Electricity rule made**Benefit/impact**

The AEMC has released new rules for the reliability and emergency reserve trader (RERT) – the emergency mechanism used when the power system is under extreme pressure.

The RERT has always been part of the market's reliability safety-net and is used by AEMO as a last-resort mechanism to keep the lights on. AEMO has only used the RERT to supply demand three times in the history of the market – in November 2017, January 2018 and in January 2019.

Using emergency reserves more frequently means higher costs associated with the RERT making their way onto consumer bills.

These new rules enhance the emergency reserve framework to provide AEMO with the flexibility it needs to meet the operational challenge arising from the restructure of the generation sector – at the lowest possible cost to consumers.

Next steps: The Reliability Panel published its latest RERT guidelines on 25 July 2019. AEMO will publish its updated RERT procedures by 26 March 2020.

Consolidation Rule 2019 No. 3 (NER version 121 and NT NER version 35; Schedules 2 and 3 to be consolidated in new versions of the NER and NT NER on commencement)

Date made 2 May 2019

Commenced 2 May 2019; 31 Oct 2019; 26 Mar 2020

Proponent AEMO

Category Standard

Application period for contingent project revenue

This new rule removes barriers so that network businesses can speed up their investments in time-critical projects.

Contingent projects are major network infrastructure assets, flagged in network revenue proposals and approved by the AER in revenue determinations.

Network businesses can now submit a contingent project application at any time during a regulatory control period up until the last 90 business days of the period's second last year.

This change may result in the earlier implementation of transmission and distribution projects, including time-critical projects while maintaining the intent of the framework – to achieve efficient outcomes for consumers through investment in network projects.

Consolidation Rule 2019 No. 4 (NER version 121 and NT NER version 35)

Date made 26 Apr 2019

Commenced 2 May 2019

Proponent Dr Kerry Schott AO

Category Expedited

Intervention compensation and settlement processes

The AEMC has made a rule to improve administrative processes related to compensation and settlement, following an AEMO intervention in the market

Generators which have been directed by AEMO to provide services – for example to maintain system strength – are paid compensation to ensure they are not out of pocket. Other participants affected by the intervention may also be compensated.

This new rule aligns the timetables for compensation and settlement following an intervention, streamlining the process used for recovering associated costs and increasing the transparency and consistency of the processes that AEMO needs to administer.

It also extends the deadline for participants to make additional claims, which will allow participants more time to assess the impact of intervention events.

Consolidation Rule 2019 No. 5 (NER version 122; Schedule 2 to be consolidated in a new version of the NER on commencement)

Date made 30 May 2019

Commenced 30 May 2019; 1 July 2021

Proponent AEMO

Category Expedited

Table B

Determinations to not make a rule in response to an electricity rule request

Electricity rule request	Reasons	Determination date
	See Table D for information about the retail rule which was made in response to this request.	25 Oct 2018
Proponent	Federal Minister for the Environment and Energy, Dr Daryl Dodt, Ms Kirsty Johnson	Category
	Standard	

Table C

Electricity rules under consideration at 30 June 2019

Electricity rule request	Status at 30 June 2019	Proponent	Initiated	Category
	Innovations in technology are making it easier for industrial customers and households to provide demand response by turning off or reducing power use at very high demand times. This can help keep costs down by avoiding unnecessary investment in generation that is only used for a few days a year.	Public Interest Advocacy Centre, Total Environment Centre, The Australia Institute	15 Nov 2018	Standard
	The COAG Energy Council recently agreed to progress a recommendation made by the ACCC in its <i>Retail Electricity Pricing Inquiry</i> report to support the development of a mechanism for third parties to offer demand response directly into the wholesale market. The AEMC also recommended the integration of more demand response through a wholesale demand response mechanism in our <i>Reliability frameworks</i> review. The AEMC has received three rule requests that relate to these recommendations.	Australian Energy Council	15 Nov 2018	Standard
	The Public Interest Advocacy Centre, Total Environment Centre and The Australia Institute are proposing a mechanism that would allow third parties, such as demand response aggregators, to offer demand response into the wholesale market in a transparent, scheduled manner. The Australian Energy Council is proposing a register for wholesale demand response. This would introduce an obligation for retailers to negotiate in good faith with third parties looking to provide wholesale demand response through a register. The South Australian Government is also proposing a wholesale demand response mechanism, and a separate, transitory market for wholesale demand response as an interim step. The AEMC held a stakeholder workshop in March 2019 and has formed a technical working group of experts from industry, demand response providers and consumer groups. Technical working group meetings were held in March, April and May 2019.	South Australian Minister for Energy	15 Nov 2018	Standard

Next steps: The draft determination was published in July 2019.

Electricity rule request**Status at 30 June 2019**

Market making arrangements aim to increase the opportunities for market participants to trade in electricity hedge contracts and to have greater visibility of wholesale contract prices. They can be voluntary or compulsory.

The AEMC has proposed not to make a rule to introduce additional market making schemes in the national electricity market.

This is because a number of initiatives are already underway that should increase contract market liquidity - in particular the ASX's voluntary market making scheme and the market liquidity obligation (MLO) which is part of the Retailer Reliability Obligation.

In making the draft determination on ENGIE's request to establish a tender for voluntary market making services, the AEMC found that additional market making arrangements beyond the ASX and MLO initiatives would ultimately add costs for consumers while being unlikely to provide any additional benefits.

Next steps: The final determination was published in September 2019.

Proponent	ENGIE
Initiated	20 Dec 2018
Category	Standard



The transformation of the electricity system is continuing to accelerate, which is presenting opportunities and challenges, including for the management of power system strength.

The intervention framework is the system's safety net and includes directions, the reliability and emergency reserve trader, and instructions.

The intervention framework has always been available to AEMO to keep the lights on, however the AEMC considers it necessary to review the interventions framework in light of the growing number of directions being issued to maintain system strength. While the intervention framework provides an important stop gap, it is not without costs and is not intended to be used to provide ongoing maintenance of power system security.

These two rule requests from AEMO are being progressed as part of the AEMC's *Investigation into intervention mechanisms and system strength in the NEM* review.

The first request proposes to extend the regional reference node test (RRN test), which is used by AEMO to determine whether to apply intervention pricing when it issues a direction, to apply to the RERT in addition to directions.

AEMO's second rule request proposes that the threshold for compensation paid to participants when AEMO intervenes to maintain security and reliability should apply per intervention event rather than per trading interval.

A joint consultation paper was published in April 2019 - seeking stakeholder feedback.

Next steps: The draft determinations were published in August 2019.

Proponent	AEMO
Initiated	4 Apr 2019
Category	Standard

Proponent	AEMO
Initiated	4 Apr 2019
Category	Standard

Table C

Electricity rules under consideration at 30 June 2019

Electricity rule request

Status at 30 June 2019



This rule request from AEMO proposes introducing a voluntary short term forward market so participants can contract for electricity in the week leading up to dispatch.

The request was based on a recommendation made by the AEMC in our 2018 *Reliability frameworks review*.

Allowing the trading of electricity contracts closer to real time could give participants greater price certainty and more options to manage financial risks.

We published a consultation paper in April 2019, seeking stakeholder feedback on the proposal including how short term risk is currently managed, what design elements should be considered, and implementation issues.

Next steps: The draft determination will be published in December 2019.

Proponent	AEMO
Initiated	11 Apr 2019
Category	Standard



We consolidated three rule requests that seek to enhance publicly available information about new generation projects – from the Australian Energy Council, AEMO and Energy Networks Australia.

The Australian Energy Council's request proposes improvements to AEMO's generation information page and requirements on new project proponents to provide AEMO with up to date information.

AEMO's proposal seeks to allow developers to register as intending participants so they can access additional information to assist them in building a generation system.

Energy Networks Australia's request would allow transmission network service providers to publish key information they have received from connection applicants about new and proposed generation connections.

We published a consultation paper in April 2019 and received 21 submissions from a broad group of stakeholders. A summary of the feedback expressed by stakeholders was featured on our website.

Next steps: The draft determination was published in July 2019.

Proponent	Australian Energy Council, AEMO, Energy Networks Australia
Initiated	18 Apr 2019
Category	Standard

Electricity rule request**Status at 30 June 2019**

In May 2019 the AEMC initiated on a rule request that raises important questions about incentives for transmission network businesses to pursue demand management projects, as an efficient alternative to network capital investment.

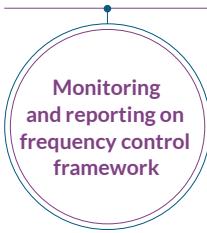
Energy Networks Australia proposed the introduction of a demand management incentive scheme and innovation allowance for transmission networks. The schemes would provide for incentive payments to the networks to undertake efficient expenditure on non-network options, and funding for research and development on demand management projects respectively. Both schemes currently apply to distribution networks.

Energy Networks Australia considers that the proposed rule change would promote innovation and create positive incentives for transmission network businesses to undertake demand management approaches, which would benefit customers through lower transmission network and total system costs.

The AEMC's consultation paper requested stakeholder submissions to inform our analysis of whether the benefits of introducing a demand management incentive scheme and innovation allowance to transmission are likely to outweigh the upfront costs to consumers.

Next steps: The draft determination was published in September 2019.

Proponent	Energy Networks Australia
Initiated	23 May 2019
Category	Standard



The frequency control framework is central to maintaining the stability of the power system, which operates within defined technical limits.

This consolidated rule request was submitted by AEMO and the AER to action recommendations we made in our *Frequency control frameworks review*.

It seeks to improve the transparency of the framework and require AEMO and the AER to report on the performance of frequency and the frequency control ancillary services (FCAS) market.

If made, the rule will formalise reporting already undertaken to support the stable and secure operation of the power system in relation to frequency control.

Next steps: A final determination was published in July 2019.

Proponent	AER and AEMO
Initiated	30 May 2019
Category	Expedited

Table C

Electricity rules under consideration at 30 June 2019

Electricity rule request	Status at 30 June 2019	Proponent	Initiated	Category
 Transmission loss factors	<p>The AEMC consolidated two related rule requests from Adani Renewables relating to the transmission loss factors framework in the national electricity network.</p> <p>When you transport electricity across a network of poles and wires, some of it is lost as heat. Marginal loss factors are calculated so customers don't pay for power they don't receive.</p> <p>The two rule requests seek to reallocate the intra-regional settlement residue evenly between generators and TNSP customers and change the methodology used to calculate marginal loss factors which Adani Renewables considers to be outdated and no longer fit-for-purpose.</p> <p>The AEMC published a consultation paper in June 2019 and invited stakeholder feedback on Adani Renewables' proposals.</p> <p>Next steps: A draft determination will be published in November 2019.</p>	Adani Renewables	6 Jun 2019	Standard
 5 minute settlement and global settlement implementation	<p>This rule change proposes administrative and technical changes to assist in implementing five minute settlement and global settlement effectively and efficiently.</p> <p>The changes that AEMO has put forward seek to improve wholesale market operations under five minute settlement, clarify global settlement arrangements and improve information provision requirements.</p> <p>The AEMC considered that all proposed amendments are non-controversial and used an expedited process to consider the rule request.</p> <p>Next steps: The final determination was published in August 2019.</p>	AEMO	13 Jun 2019	Expedited

Table D

Retail rules made by the AEMC in 2018-2019

Retail rule made	Benefit/impact	
	<p>This rule makes retailers give their electricity and gas customers advance notice of price changes.</p> <p>Under the new rule, retailers must notify customers at least five business days before their energy prices change. Previously, price change notifications were provided up to three months after the change had taken effect.</p> <p>Advance notice gives people more time to take action – like shopping around for a better deal, or accessing their usage data to work out how they can best manage the change in price.</p> <p>Notices must be sent by the customer's preferred form of communication and include information on the energy tariffs and charges to apply both before and after the change.</p>	<p>Consolidation Rule 2018 No. 3 (Schedule 2 - NERR version 14; Schedule 1 – NERR version 17)</p> <p>Date made 27 Sep 2018</p> <p>Commenced 4 Oct 2018; 1 Feb 2019</p> <p>Proponent Federal Minister for the Environment and Energy, New South Wales Minister for Energy</p> <p>Category Standard</p>
	<p>The AEMC has made a new rule to make retailers accept meter reads provided by customers who think their estimated electricity or gas bill is wrong.</p> <p>Retailers may base bills on estimated usage if meter readers have been unable to carry out an actual read because of access problems like locked gates or a dog in the yard. Although less than five per cent of energy bills are based on estimated reads, state energy ombudsmen and consumer groups have advised that billing disputes about inaccurate estimates are one of the most frequent categories of customer complaints.</p> <p>Enabling customers to do meter self-reads in these situations will reduce the risk of customers being exposed to higher bills based on overestimated energy use, or having to repay significant sums due to previous bills based on underestimated energy use.</p>	<p>Consolidation Rule 2018 No. 4 (NERR version 17)</p> <p>Date made 25 Oct 2018</p> <p>Commenced 1 Feb 2019</p> <p>Proponent Federal Minister for the Environment and Energy, Dr Daryl Dodt, Ms Kirsty Johnson</p> <p>Category Standard</p>
	See Table A	<p>Consolidation Rule 2018 No. 5 (NERR version 15)</p> <p>Date made 8 Nov 2018</p> <p>Commenced 9 Nov 2018</p> <p>Proponent AEMC</p> <p>Category Expedited</p>

Table D
Retail rules made by the AEMC in 2018-2019

Retail rule made	Benefit/impact	
 <p>Strengthening protections for customers in hardship</p>	<p>This rule placed new obligations on retailers to help vulnerable customers pay their bills. Retailers must now detail their process for early identification of vulnerable customers so they can be included on hardship programs before their debts get out of control. They will also have to use consistent, transparent and specific action statements in their hardship policies so customers know their rights. New and existing retailers must submit their customer hardship policies to the AER for approval.</p> <p>In the final determination the AEMC and the AER jointly recommended new civil penalties, such as fines, to protect customers if retailers fail to comply with the new obligations. Having clearer hardship policies would also make it easier for the AER to monitor the performance of retailers and penalise any breaches.</p> <p>Next steps: All current retailers must have their updated, complying hardship policies implemented by no later than 2 October 2019. New retailers will have three months from the time they are granted retailer authorisation to submit a complying hardship policy to the AER.</p>	<p>Consolidation Rule 2018 No. 6 (NERR version 16)</p> <p>Date made 15 Nov 2018</p> <p>Commenced 15 Nov 2018</p> <p>Proponent AER</p> <p>Category Standard</p>
 <p>Metering installation timeframes</p>	<p>See Table A</p>	<p>Consolidation Rule 2018 No. 7 (NERR version 17)</p> <p>Date made 6 Dec 2018</p> <p>Commenced 1 Feb 2019</p> <p>Proponent Federal Minister for the Environment and Energy</p> <p>Category Standard</p>

Table E
Determinations to not make a rule in response to a retail rule request

Retail rule request	Reasons	
 <p>Register of distributed energy resources</p>	<p>See Table A for information about the electricity rule which was made in response to this request.</p>	<p>Determination date 13 Sep 2018</p> <p>Proponent COAG Energy Council</p> <p>Category Standard</p>

Table F

Retail rules under consideration at 30 June 2019

Retail rule request	Status at 30 June 2019	
<p>Wholesale demand response mechanism</p>	<p>See Table C</p>	<p>Proponent Public Interest Advocacy Centre, Total Environment Centre, The Australia Institute</p> <p>Initiated 15 Nov 2018</p> <p>Category Standard</p>
<p>Wholesale demand response register mechanism</p>	<p>See Table C</p>	<p>Proponent Australian Energy Council</p> <p>Initiated 15 Nov 2018</p> <p>Category Standard</p>
<p>Mechanisms for wholesale demand response</p>	<p>See Table C</p>	<p>Proponent South Australian Minister for Energy</p> <p>Initiated 15 Nov 2018</p> <p>Category Standard</p>
<p>Bill contents – customers with interval meters</p>	<p>Under the National Energy Retail Rules, retailers must include the values of meter readings at the start and end of the billing period. However, for interval meters, the rules include a provision that permits retailers not to display these values if the metering data required is difficult to obtain.</p> <p>This rule request from Mr Craig Whybrow proposed that retailers be required to provide a bill for customers with interval meters that shows the meter readings at the start and end of the billing period, in addition to the information currently provided on the total electricity used in the period.</p>	<p>Proponent Mr Craig Whybrow</p> <p>Initiated 31 Jan 2019</p> <p>Category Standard</p>

Next steps: A final determination was published in July 2019.

Table G

Gas rules made by the AEMC in 2018-2019

Gas rule made	Benefit/impact	
 Cross period revenue smoothing	<p>The AEMC made a rule to help minimise network price volatility for NSW gas consumers that could occur following a delay in the finalisation of Jemena Gas Networks' 2015-2020 access arrangement. This delay was a result of judicial and merits review proceedings.</p> <p>The rule meant the AER was able to shift Jemena's revenue between the current access arrangement period (2015-2020) and subsequent access arrangement period to minimise price volatility for customers.</p>	Consolidation Rule 2018 No. 2 (NGR version 39) Date made 30 Aug 2018 Commenced 6 Sep 2018 Proponent Jemena Gas Networks Category Standard
 Regulation of covered pipelines	<p>This rule will implement a range of improvements to how transmission and distribution gas pipelines are regulated across Australia. The fast tracked rule request, from the COAG Energy Council, was based on recommendations made by the AEMC in the <i>Review into the scope of economic regulation applied to covered pipelines</i>.</p> <p>The new rules are designed to help gas pipeline users negotiate lower prices and better deals. This will make it cheaper to move gas around the market, helping to keep gas and electricity prices for consumers as low as possible.</p> <p>The rule change was fast tracked as we had already consulted extensively on the issues and recommendations during the preceding review.</p> <p>Next steps: The AEMC has included transitional arrangements for those full regulation pipelines that are currently, or will soon be, engaged in an access arrangement revision process to enable a smooth adoption of the new and amended rules. Access arrangement proposals submitted after June 2020 will be subject to all of the new access arrangement requirements made in the final rule.</p>	Consolidation Rule 2019 No. 2 (Schedules 1 and 5 - NGR version 44; Schedule 3 - NGR version 45; Schedule 4 - NGR version 46; schedule 2 - NGR version 47) Date made 14 Mar 2019 Commenced 21 Mar 2019, 21 Apr 2019, 21 Jun 2019, 21 Jul 2019 Proponent COAG Energy Council Category Fast tracked
 Recognition of exempt sellers in retail market	<p>The AEMC has made a rule to enable sellers to participate in various east coast gas retail markets. Under the final rule, the National Gas Rules will recognise exempt sellers under the National Energy Retail Law and enable them to be registered as self-contracting users, if they are selling gas to a related business, or as retailers if they are selling gas to an unrelated business.</p> <p>Next steps: The rule commenced on 8 August 2019.</p>	Consolidation Rule 2019 No. 2 (NGR version 48) Date made 18 Apr 2019 Commenced 8 Aug 2019 Proponent AEMO Category Expedited

Table H

Determinations to not make a rule in response to a gas rule request

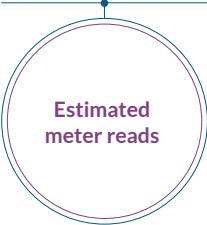
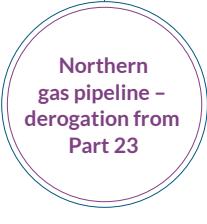
Gas rule request	Reasons	Determination date
	See Table D for information about the retail rule which was made in response to this request.	25 Oct 2018
Proponent		Federal Minister for the Environment and Energy, Dr Daryl Dodt, Ms Kirsty Johnson
Category		Standard

Table I

Gas rules under consideration at 30 June 2019

Gas rule request	Status at 30 June 2019	Proponent	Environmental Justice Australia, Institute for Energy Economics and Financial Analysis
	The Northern Gas Pipeline, between Tennant Creek in the Northern Territory and Mt Isa in Queensland, was built by Jemena after it won a competitive tender process run by the Northern Territory Government in 2015. The Northern Gas Pipeline started commercial operations in January 2019 and does not need to comply with the requirements for providing information or dispute resolution procedures, due to a derogation in the National Gas Rules. Environmental Justice Australia and the Institute for Energy Economics and Financial Analysis submitted a rule request to revoke this derogation. The AEMC's draft determination found the existing regulatory regime for the pipeline – which was put in place by the Northern Territory Government as part of a binding contract – is effective. Also, adding new regulatory requirements for the pipeline would be costly and potentially confusing for both Jemena and users. At the request of the proponents, the AEMC held a hearing prior to the final determination for this rule request so that stakeholders could present views to AEMC Commissioners in person. We held a further consultation period after the hearing. In not making a draft rule, the AEMC noted the unique circumstances at the time the derogation was made, in particular, that Part 23 of the National Gas Rules was not yet in place. To provide protections for pipeline users, the Northern Territory Government included a range of conditions in the binding contract. In particular, Jemena must offer any potential pipeline users services at a set price. In the future, pipelines like the Northern Gas Pipeline will be regulated under the framework set out in Part 23, which will eliminate the need for specific exemptions of this type.	Initiated	15 Nov 18
Category	Standard	Category	Standard

Next steps: The final determination was published in July 2019.

RULES AND REVIEWS

Gas rule request	Status at 30 June 2019	Proponent	
 NT emergency gas supply arrangements	<p>The AEMC has made a draft rule that would, if made, exempt the Northern Territory's LNG projects from Natural Gas Bulletin Board reporting of gas flows that are upstream of their connection with the domestic gas market.</p> <p>The draft rule aims to address concerns that, due to confidentiality requirements, the Northern Territory LNG projects may not continue to provide back-up gas supply into the domestic market if they are required to report on their upstream activities on the Bulletin Board.</p> <p>Any gas flows into the domestic market (via the connecting Wickham Point pipeline) would still be reported on the Bulletin Board.</p> <p>The exemption would be provided under circumstances in which gas flow into the domestic market occurs for the purposes of emergency back-up supply only.</p> <p>Next steps: The final determination was published in August 2019.</p>	Proponent	Northern Territory Treasurer
 DWGM simpler wholesale price	<p>The AEMC has published a consultation paper on two consolidated rule requests from Minister Lily D'Ambrosio which seek to simplify and improve wholesale gas prices in the Victorian Declared Wholesale Gas Market (DWGM).</p> <p>The rule requests seek to spread congestion uplift payments across market participants, instead of the current approach that aims to recover congestion uplift payments from those parties that caused the congestion and enable physical constraints on withdrawals of gas to be factored in by AEMO when calculating the market price for the DWGM.</p> <p>A summary of stakeholder submissions was published on the AEMC's website in May 2019</p> <p>Next steps: The draft determination was published in September 2019.</p>	Proponent	Victorian Minister for Energy and Climate Change
 DWGM forward trading market	<p>This rule request from the Victorian Minister for Energy, Environment and Climate Change proposes introducing a forward trading market for physical gas in the Victorian DWGM.</p> <p>It is one of three rule change requests submitted by the Victorian Minister, all of which are based on recommendations made in the AEMC's 2017 <i>Review of the Victorian Declared Wholesale Gas Market</i>.</p> <p>A consultation paper was published in March 2019 and we held a stakeholder workshop in May 2019 which looked at detailed design options.</p> <p>Next steps: The draft determination was published in July 2019.</p>	Proponent	Victorian Minister for Energy and Climate Change
 DWGM – improvement to AMDQ regime	<p>The third rule request from the Victorian Minister for Energy, Environment and Climate Change proposes to reduce the complexity of the existing authorised maximum daily quantity (AMDQ) regime in the Victorian DWGM.</p> <p>The change may make it easier for participants to secure and trade AMDQ rights, and take a step towards providing better signals for capacity usage to facilitate market-led investment.</p> <p>A consultation paper was published in March 2019 and we received 11 stakeholder submissions.</p> <p>Next steps: The draft determination was published in September 2019.</p>	Proponent	Victorian Minister for Energy and Climate Change
		Initiated	14 Mar 19
		Category	Standard

Table J

Market reviews and advice summary table

COAG ENERGY COUNCIL INITIATED REVIEWS				
AEMC project	Proponent	Start date	End date	Status at 30 June 2019
Review into the scope of economic regulation applied to covered pipelines	COAG Energy Council	5 May 2017	3 July 2018	Completed
Electricity network economic regulatory framework review 2018	COAG Energy Council	6 February 2018	26 July 2018	Completed
Biennial review into liquidity in wholesale gas and pipeline trading markets	COAG Energy Council	20 Dec 2017	16 August 2018	Completed
Gaming in rebidding	Minister Josh Frydenberg	10 July 2018	28 September 2018	Completed
AEMC and AEMO joint COAG Energy Council advice: customer transfers	COAG Energy Council	19 October 2018	3 December 2018	Completed
Advice to COAG Energy Council: default offer	COAG Energy Council	12 November 2018	20 December 2018	Completed
Coordination of generation and transmission investment	COAG Energy Council	29 February 2016	21 December 2018	Completed
Residential electricity price trends 2018	COAG Energy Council	31 May 2018	21 December 2018	Completed
Retail energy competition review 2019	COAG Energy Council	24 January 2019	28 June 2019	Completed
Review of the system black event in South Australia on 28 September 2016	COAG Energy Council	6 January 2017	Continuing	Preparation of draft report
NSW embedded networks and stand-alone systems advice	NSW Government	7 March 2018	Continuing	Preparation of final report
Review of the regulatory frameworks for stand-alone power systems	COAG Energy Council	23 August 2019	Continuing	Preparation of final report

RULES AND REVIEWS

Table J

Market reviews and advice summary table

OTHER REVIEWS AND ADVICE

AEMC project	Proponent	Start date	End date	Status at 30 June 2019
Frequency control frameworks review	AEMC	7 July 2017	26 July 2018	Completed
Reliability frameworks review	AEMC	11 July 2017	26 July 2018	Completed
Last resort planning power – 2018 review	Rules requirement	22 November 2018	14 February 2019	Completed
Updating the regulatory frameworks for embedded networks	AEMC	30 August 2019	20 June 2019	Completed
Electricity network economic regulatory framework review 2019	AEMC	17 January 2019	Continuing	Preparation of draft determination
Coordination of generation and transmission investment implementation - access and charging	AEMC	1 March 2019	Continuing	Preparation of draft report
Investigation into intervention mechanisms and system strength in the NEM	AEMC	4 April 2019	Continuing	Preparation of draft report

RELIABILITY PANEL PROJECTS

AEMC project	Proponent	Start date	End date	Status at 30 June 2019
Appointment of Panel members 2018	Reliability Panel	28 September 2018	14 December 2018	Completed
Annual market performance review 2018	AEMC	6 September 2018	4 April 2019	Completed
Review of the frequency operating standard	AEMC	30 March 2017	18 April 2019	Completed
Request for declaration of protected event	AEMO	13 December 2018	20 June 2019	Completed
Generator compliance template review - 2019	AEMC	26 February 2019	Continuing	Preparation of draft report
Definition of unserved energy	Reliability Panel	4 April 2019	Continuing	Preparation of final report
Review of the reliability and emergency reserve trader 2019	AEMC	23 May 2019	Continuing	Preparation of final report

Table K

Market reviews and advice completed

Review name	Overview	Expected benefits/impacts from recommendations
 <p>Review into the scope of economic regulation applied to covered pipelines</p>	<p>The COAG Energy Council tasked the AEMC with reviewing the effectiveness of gas pipeline regulation to address concerns that consumers may be paying more than necessary for gas pipeline services.</p> <p>This request follows the AEMC's east coast wholesale gas market and pipeline frameworks review, the ACCC's inquiry into the competitiveness of wholesale gas prices in eastern and southern Australia, and Dr Michael Vertigan's December 2016 paper on the current regulatory test for the regulation of gas pipelines.</p>	<p>In July 2018, the AEMC released a package of recommendations on stronger regulation of gas pipeline would help pipeline users negotiate lower prices and better deals for shipping gas.</p> <p>More services would be subject to access arrangements, prices would be set at more efficient levels, contract terms would be more balanced, and arbitration would act as a more credible back-stop if negotiations fail.</p> <p>The AEMC has also recommended giving regulators oversight of a wider range of pipeline services, and allowing all stakeholders, including pipeline users, to have more input into regulators' decisions on appropriate prices, services and conditions.</p> <p>In developing these recommendations, the AEMC worked closely with the ACCC as it continued its gas market inquiry, the AER, the Economic Regulation Authority of Western Australia and the Gas Market Reform Group. Stakeholders also provided valuable input in a series of workshops and bilateral meetings.</p> <p>This work is another step in the ongoing redesign of Australia's gas markets.</p>
 <p>Electricity network economic regulatory framework review 2018</p>	<p>The annual review of the economic regulatory framework for electricity networks is part of the AEMC's work to support the continual evolution of the energy sector.</p> <p>In light of the significant growth in decentralised energy resources, the review will examine whether the economic regulatory framework is robust, flexible and continues to support the efficient operation of the energy market in the long-term interest of consumers.</p> <p>We do this by monitoring changes and developments in the national electricity market and where necessary, recommend changes to the economic regulatory framework to the COAG Energy Council.</p>	<p>In July 2018 the AEMC published the final report for the 2018 economic regulatory framework review. This year's review focussed on networks' incentives to deliver services at the lowest possible cost. As recommended by the Finkel review, this included testing whether network businesses have a bias towards traditional network solutions over demand-side measures.</p> <p>The review found that the regulatory framework is currently flexible enough to support integration of distributed energy resources like solar PV, batteries and price-responsive appliances, especially as major changes in recent years have reduced network costs and introduced cost-reflective pricing.</p> <p>However, we are monitoring the need for more changes to support likely future scenarios where there is a much higher penetration of distributed energy resources and more multidirectional energy flows.</p> <p>The report found that incentive-based regulation continues to be the right approach for deciding how much revenue a network can recover from consumers. But as new technologies offer more non-network solutions as alternatives to 'poles and wires' investment, the method of expenditure assessment and remuneration may need to change in the future.</p> <p>The report also looked at how the regulatory framework may need to change more broadly to support a grid with more distributed energy resources. The AEMC will work with AEMO, Energy Networks Australia and other stakeholders on potential models for the optimisation of distribution-level markets.</p>

Next steps: As part of the 2019 economic regulatory framework review, the AEMC will consider changes to the expenditure assessment and remuneration provision of the rules to develop arrangements that better align capital expenditure and operating expenditure arrangements.

Table K
Market reviews and advice completed

Review name	Overview	Expected benefits/impacts from recommendations
<p>Biennial review into liquidity in wholesale gas and pipeline trading markets</p>	<p>Gas markets are currently being redesigned to support faster and more efficient gas trading and access to pipeline transportation along the east coast of Australia. The changes are based on a package of reforms developed by the AEMC and endorsed by the COAG Energy Council.</p> <p>In December 2017 the COAG Energy Council asked the AEMC to conduct a biennial review into the growth of liquidity in the wholesale gas and pipeline capacity trading markets. The terms of reference require the AEMC to monitor changes in liquidity, report on the effectiveness of reforms and identify the need for any further reforms, if appropriate.</p>	<p>As implementation of the complete gas market reform package will take several years, this first review of gas market liquidity provides a baseline for future reviews.</p> <p>The final report found that liquidity at the gas supply hub at Wallumbilla has increased over the past two years. This positive change was reflected in almost all metrics of liquidity that formed part of the analysis.</p> <p>Where information was available, metrics were also calculated for other facilitated gas markets including the gas supply hub at Moomba, the short-term trading markets, the Victorian DWGM and pipeline capacity markets. Results for these other markets were more diverse across all metrics.</p> <p>Going forward, the AER will publish these quantitative liquidity indicators on its website on a regular basis to promote market transparency.</p> <p>The review's final report noted that it was too early to assess the trends for gas market liquidity from these initial metrics, but the baseline measures will enable the AEMC to track progress and assess the effectiveness of reforms and the case for further reform to wholesale gas and pipeline trading markets over the longer term.</p> <p>Next steps: Future biennial reviews will continue to monitor changes in liquidity in the wholesale gas and pipeline capacity trading markets, report on the effectiveness of reforms in the east coast and Victorian gas markets and identify the need for any further reforms, if appropriate.</p>
<p>Gaming in rebidding</p>	<p>Federal Energy Minister Josh Frydenberg asked the AEMC to consider claims made in a report by the Grattan Institute on gaming practices in the wholesale electricity market.</p>	<p>Price spikes in the wholesale energy market can be caused by a range of factors, including higher than expected demand, a generator fault, network constraints and other changes in market conditions. Sometimes generators will rebid in response to these changed conditions.</p> <p>The AER monitors and investigates rebidding behaviour and also instances where the actual wholesale price is significantly different to the forecast price (informed by pre-dispatch bids).</p> <p>Developed in collaboration with the AER, our report used detailed data on high price events in which rebidding was the primary cause.</p> <p>The AEMC's analysis found generator rebidding is contributing to the delivery of efficient market outcomes but can be a problem where there is a lack of competition between generators, permitting dominant generators to set wholesale prices.</p> <p>Our report noted that issues with industry structure are best addressed by policies that reduce market concentration, lower barriers to entry, and promote efficient new investment. Increased investment in generation capacity and demand response will improve competition and help alleviate the impact of market concentration in the future.</p>

Review name	Overview	Expected benefits/impacts from recommendations
<p>AEMC and AEMO joint COAG Energy Council advice: customer transfers</p>	<p>The ACCC published its <i>Retail Electricity Pricing Inquiry</i> final report in July 2018.</p> <p>To improve the existing customer transfer process, the report recommended AEMO amend its procedures so that losing retailers are only given a loss notification on the actual date of transfer of financial responsibility for the customer to the new retailer, and the AEMC make changes to speed up the customer transfer process, for example by enabling customers to use self-reads of their electricity meters.</p> <p>The COAG Energy Council asked the AEMC and AEMO to consider and address these recommendations.</p>	<p>Our advice to the COAG Energy Council, developed with AEMO, recommended changes to the process and procedures that underpin transfers so market participants are able to better meet customer expectations.</p> <p>A smoother customer transfer process will also support competition in the retail market.</p> <p>Before providing advice, we consulted with government departments, the AER, Energy Consumers Australia, the Australian Energy Council, the NSW Energy and Water Ombudsman and the St Vincent de Paul Society.</p> <p>We proposed a broad set of reforms to customer transfers including:</p> <ul style="list-style-type: none"> • AEMO continuing to monitor and enforce existing procedures to identify non-compliance, and updating procedures as necessary • AEMO producing a high level design and submitting rule changes for a streamlined customer transfer process which improves customer satisfaction. The associated rule changes will also take customer protection issues including billing and contract information into account. <p>The proposed changes will complement reforms currently underway, including the rollout of competitive metering, the Consumer Data Right and the recent AEMC rule change enabling customers to provide meter self-reads.</p>
<p>Advice to COAG Energy Council: default offer</p>	<p>At its October 2018 meeting, the COAG Energy Council asked the AEMC to assess the potential customer and competition impacts of setting a hard cap default offer.</p>	<p>Market offers are set by energy retailers. Retailers have flexibility in designing market offers for customers; including how they set prices, discounts, incentives, different billing periods and additional fees and charges for flexible service arrangements.</p> <p>Customers who don't sign up to a market offer are put on a retailer's standing offer where prices are generally higher and discounts can't be applied.</p> <p>The AEMC has recommended that a reference price (sometimes called a comparison rate) be introduced to help customers compare standing offers and market offers. The additional transparency provided by a reference price would also remove the incentives for retailers to set high standing offers simply to advertise a so-called larger discount.</p> <p>Our <i>Retail energy competition review 2019</i> provided further advice on targeted actions to help customers on standing offers compare and select a deal that suits their needs.</p>

Table K

Market reviews and advice completed

Review name	Overview	Expected benefits/impacts from recommendations
 <p>Coordination of generation and transmission investment</p>	<p>In response to the AEMC's recommendations in the final report for the <i>Optional firm access, design and testing review</i>, the COAG Energy Council has asked the AEMC to implement a biennial regime to report on drivers of change that impact transmission and generation investment.</p> <p>The AEMC will undertake a two-stage approach to reporting.</p> <p>At least every two years we will publish a stage one report consisting of a high-level analysis of whether drivers in the NEM have changed substantially such that a more detailed examination of the conditions is warranted.</p> <p>Where a second stage is required, the AEMC will conduct an in-depth assessment of how the driver(s) have changed.</p> <p>We will also consider whether the implementation of a model that would introduce more commercial drivers into transmission and generation investment, or other changes to the regulatory framework, would meet the National Electricity Objective.</p>	<p>A huge amount of generation will be built in the national electricity market in the coming years, taking the place of ageing coal-fired power. AEMO's 2018 integrated system plan forecast the overall transmission system requirements to connect these new generators over the next 20 years.</p> <p>Transmission networks can be very expensive to build – running into many millions of dollars. Once built, consumers pay for them for decades. The AEMC's <i>Coordination of generation and transmission investment</i> final report set out the regulatory changes needed to deliver the integrated system plan in the required timeframe – and at the least cost.</p> <p>In developing this reform package, the AEMC looked at transmission charging arrangements, transmission planning arrangements, generator access arrangements, and the development of renewable energy zones as raised in the Finkel review.</p> <p>Our key recommendations included:</p> <ul style="list-style-type: none"> • directly linking investment decisions by transmission businesses to the integrated system plan, to speed up regulatory approval processes • streamlining the cost-benefit assessment (RIT-T) for new transmission by removing duplication from the process. • managing congestion so the cheapest power can get to consumers • allowing generators to pay for transmission infrastructure in exchange for access • facilitating renewable energy zones through generators' funding of transmission infrastructure • making it easier for large-scale storage systems to connect by creating a new registration category to support seamless integration

Next steps: The ESB is implementing the delivery of the Integrated System Plan in the timeframes identified by AEMO. In February 2019 we started the second *Coordination of generation and transmission investment* review which will progress two of the key recommendations from the first review's final report.

Review name	Overview	Expected benefits/impacts from recommendations
 Residential electricity price trends 2018	<p>This report is the ninth annual residential electricity price trends report prepared by the AEMC at the request of the COAG Energy Council. The report provides information on the supply chain components expected to affect the trends in residential electricity prices for each state and territory of Australia over the three years from 2017/2018 to 2020/2021</p>	<p>The AEMC's annual report on price trends provides an overall picture of factors driving electricity prices for households in each state and territory. While the report is not a forecast of prices, it analyses cost trends across the electricity supply chain including generation and the regulated networks sector; and price impacts resulting from government environmental and system security policies.</p> <p>No two households use energy in the same way. Price trends will affect individual households differently depending on how much each consumer uses electricity, and how willing they are to switch to a better energy deal where market offers are available.</p> <p>This year's report showed residential electricity prices for the next two years are estimated to fall slightly because of structural change in the wholesale generation sector. Demand is relatively flat and a pipeline of new renewables supply is taking pressure off prices.</p> <p>All states in the national electricity market - SA, VIC, TAS, NSW and south east Queensland - are expected to see lower prices. ACT prices are estimated to increase due to rising environmental and network costs. The WA and NT governments have set slight price rises for their jurisdictions.</p> <p>The report recognises there were a range of issues unique to each jurisdiction that were also influencing price outcomes.</p> <p>Understanding what's driving prices can help give state and territory governments the information they need to help determine if price changes announced each year by retailers are consistent with changes in the power system's underlying costs.</p>

Table K
Market reviews and advice completed

Review name	Overview	Expected benefits/impacts from recommendations
 <p>Retail energy competition review 2019</p>	<p>This annual review of energy retail competition assesses the state of competition in the small customer electricity and natural gas retail markets in all national electricity market jurisdictions.</p> <p>Retail competition reviews are conducted in accordance with the framework set out in the Australian Energy Market Agreement (AEMA).</p> <p>A range of information sources are used to form an evidence base to assess the state of competition against the following five competitive market indicators:</p> <ul style="list-style-type: none"> • the level of customer activity in the market • customer satisfaction with market outcomes • barriers to retailers entering, expanding or exiting the market • the degree of independent rivalry • whether retail energy prices are consistent with a competitive market. 	<p>The AEMC's 2019 retail competition review shows bill reductions in most jurisdictions across the national electricity market. Consumers are using competition and new technology to choose energy plans that are simpler, and usually cheaper, or to get access to more innovative products and services.</p> <p>One in three customers are leaving the big three retailers - Origin, AGL Energy and EnergyAustralia - to sign up with smaller players. For the first time, the big three were toppled from having the dominant market share in South Australia and south-east Queensland.</p> <p>The momentum of change continues to accelerate. The falling costs of battery technology, favourable consumer sentiment and the introduction of government subsidy schemes mean that the average household could acquire solar PV and battery storage for the same price per kWh as buying energy from the grid as early as 2020¹. This so-called socket parity will put consumers in charge of their energy future and their energy bills.</p> <p>Our competition review report also recommended funding for consumer and community organisations to help vulnerable consumers develop their energy literacy, including better understanding of financial schemes offered by retailers and governments.</p> <p>While many retailers go beyond minimum requirements, more can be done including:</p> <ul style="list-style-type: none"> • promoting consumer awareness of available support programs • earlier identification of customers experiencing difficulty paying their bills • improving reporting and compliance. <p>Using new rules made by the AEMC the AER has developed new guidelines on retailer obligations to support vulnerable people so customers can better understand their rights and get the help they need to pay their power bills.</p> <p>The guidelines include standardised statements and greater consistency in the way retailers identify vulnerable customers and how they access retailer support.</p> <p>While many retailers go beyond minimum requirements, more can be done including:</p> <ul style="list-style-type: none"> • promoting consumer awareness of available support programs • earlier identification of customers experiencing difficulty paying their bills • improving reporting and compliance. <p>Next steps: The AEMC will look at whether the current National Energy Customer Framework (NECF) is fit for purpose. Stage one of this work is related to the NECF and Australian Consumer Law mapping undertaken as part of this review. Further consideration of broad themes and issues about consumer protections related to payment and financial difficulty will start in the second half of 2019.</p>

¹ Australian Energy Market Commission, 2019 retail energy competition review, Final report, 28 June 2019, Sydney.

Review name	Overview	Expected benefits/impacts from recommendations
 Frequency control frameworks review	<p>The electricity sector in Australia is experiencing a period of change as the proportion of newer types of electricity generation, such as wind and solar, increases. These new sources of electricity are changing the way Australia's power system works.</p> <p>Challenges in maintaining power system security are emerging because of the physics of maintaining technical generation parameters like grid frequency.</p> <p>The AEMC initiated this review to address current concerns with frequency performance in the national electricity market and to consider how best to integrate faster frequency control services offered by new technologies into the current regulatory and market arrangements.</p> <p>It progressed a number of recommendations made by the AEMC in our system security market frameworks review for possible changes to market arrangements that will lead to more efficient outcomes for energy consumers while delivering a secure operating system.</p>	<p>With more wind and solar in the electricity system, and coal-fired generators exiting, the technical characteristics of the electricity grid are changing. This makes it more challenging to keep the system secure and maintain frequency within the required limits under normal operating conditions.</p> <p>The <i>Frequency control frameworks review</i>'s final report was published in July 2018. It described how frequency performance in the national electricity market has worsened in recent years, and recommended changes to help make the power system more secure at the least cost.</p> <p>The recommendations aim to address frequency performance in the national electricity market, remove barriers to distributed energy resources participating in system security frameworks and explore how best to integrate faster frequency control services offered by new technologies into the current regulatory and market arrangements.</p> <p>Proposed changes include:</p> <ul style="list-style-type: none"> • improved incentives for generators to use their equipment more effectively to keep frequency within secure limits • market development options to promote investment in batteries and other new technologies that can provide least cost frequency control services • AEMO undertaking monitoring and publishing regular reports on frequency performance • AER monitoring and reporting on the performance of FCAS markets. <p>Next steps: the AEMC will continue to work closely with AEMO and other stakeholders on a longer-term, collaborative work plan to address the security needs of the system at least cost.</p>

RULES AND REVIEWS

Table K

Market reviews and advice completed

Review name	Overview	Expected benefits/impacts from recommendations
 Reliability frameworks review	<p>This AEMC-initiated review looked at ways to deliver a reliable power system - one that has enough electricity available when consumers need it - at the lowest cost. It included consideration of several recommendations from the Finkel panel's independent review into the future security of the national electricity market that relate to reliability.</p> <p>The AEMC worked collaboratively with AEMO, the Reliability Panel and the AER on the development of proposals and recommendations.</p> <p>Stakeholder input included a reference group to provide high-level input into the review and a technical working group to provide technical advice.</p>	<p>The AEMC's <i>Reliability frameworks</i> review is a core part of our reliability and security work program. The final report made a series of recommendations to accommodate significant changes in electricity generation and consumption.</p> <p>These changes are another step towards a more resilient power system that can efficiently serve energy users into the future without imposing unnecessary costs on consumers.</p> <p>We have proposed new rules and mechanisms for adoption right now and added more flexibility into system frameworks so they can keep evolving in response to changes in technology and consumer preferences.</p> <p>Key changes include:</p> <ul style="list-style-type: none"> • clearing the way for energy users to participate directly in the wholesale electricity market to facilitate greater demand management and deliver lower-cost reliability, fast-tracked through early collaboration with stakeholders • improving the transparency and consistency of forecasting supply and demand and the regular reporting of frequency variations in the market to inform both on-the-ground decisions for generators, large users, retailers and the market operator and the evolution of future policy.
 Last resort planning power – 2018 review	<p>The last resort planning power is an oversight mechanism conferred on the AEMC to complement the planning roles of AEMO, as national transmission planner, and transmission network companies.</p> <p>It allows the AEMC to require network companies to consider and consult on options to alleviate constraints on the interconnected transmission network when these companies have not initiated this process themselves.</p>	<p>After reviewing system planning reports prepared by AEMO and transmission businesses, the AEMC confirmed there is no need to exercise the last resort planning power for 2018.</p> <p>This year's report found transmission network service providers are adequately considering the need for inter-regional investment in their transmission planning processes.</p> <p>The AEMC also notes that regulatory processes are already underway for all Group 1 projects and some Group 2 projects that were prioritised in AEMO's integrated system plan (ISP).</p> <p>Next steps: We will continue to use the last resort planning power process to monitor inter-regional constraints in the transmission network. This includes monitoring projects identified in the 2018 ISP, as recommended by the Energy Security Board in its December 2018 advice to the COAG Energy Council.</p>

Review name	Overview	Expected benefits/impacts from recommendations
 Updating the regulatory frameworks for embedded networks	<p>The AEMC's Review of regulatory arrangements for embedded networks, completed in November 2017, found that the current regulatory arrangements for embedded networks were no longer fit-for-purpose.</p> <p>The recommendations we made would provide embedded network customers with appropriate levels of access to retail competition and consumer protections.</p> <p>We initiated the <i>Updating the regulatory frameworks for embedded networks</i> review to develop detailed advice on how to implement the proposed framework set out in our 2017 review.</p>	<p>Embedded networks are private electricity networks which serve multiple customers from a connection point which is managed by an exempt network service provider.</p> <p>Generally, these exempt network service providers on-sell electricity to their customers in these off-market networks like shopping centres, retirement villages, apartment blocks and caravan parks. In recent years, installing and operating embedded networks has evolved into a new business model for parties whose core activity is supplying and selling energy, especially in high density apartment buildings, commercial districts and residential villages.</p> <p>During the course of this review, we consulted extensively with consumers, embedded network operators, retailers, developers, ombudsmen, state governments and renewable energy advocates.</p> <p>Our final proposed reform blueprint would give hundreds of thousands of people living and working in embedded electricity networks like apartment buildings, shopping centres and retirement villages access to the same rights, protections and prices as everyone else.</p> <p>Embedded networks can offer important benefits to consumers, provided they are appropriately regulated and customers are fully informed when they sign up to these deals which can last for many years.</p> <p>The changes would strengthen regulation so people in embedded networks can't be treated as second class customers.</p>
 Appointment of Panel members 2018	<p>The statutory process for nomination and appointment of Reliability Panel members is set out in the National Electricity Rules.</p> <p>It involves consultation with registered generators and TNSPs and voting by those stakeholders on the nominees.</p>	<p>The appointment terms for Miles George, the generator representative on the Reliability Panel, and Lance Balcombe, the TNSP representative on the Reliability Panel, expired on 17 December 2018.</p> <p>In October 2018 the AEMC invited registered generators and TNSPs to nominate candidates to represent them on the Panel.</p> <p>After a nomination approval and voting process, three new members were appointed to the Reliability Panel:</p> <ul style="list-style-type: none"> • Mark Collette, EnergyAustralia – appointed as the generator representative • Stephen Clark, TasNetworks – appointed as the TNSP representative • John Titchen, Goldwind Australia – appointed as a discretionary member

Table K
Market reviews and advice completed

Review name	Overview	Expected benefits/impacts from recommendations
<p>Annual market performance review 2018</p>	<p>The annual market performance review is a requirement under the National Electricity Rules.</p> <p>It provides the Panel with the opportunity to consider specific events that have occurred in the national electricity market over the previous financial year, and to assess the performance of the power system against standards and guidelines determined by the Reliability Panel.</p> <p>The annual market performance review may assist governments, policy makers and market institutions to monitor the performance of the power system, and to identify the likely need for improvements to the various measures available for delivering reliability, security and safety.</p>	<p>The 2017 annual market performance review's final report, which looked at the power system's performance for the 2017-2018 financial year, found the speed of structural change is putting growing pressure on power system security and reliability.</p> <p>This year's report detailed the security implications attached to rapid change in the power system's generation mix, with the power system only meeting consumers' needs because AEMO is using built-in safety nets on a daily basis to keep the lights on. These expensive stop-gap measures are not meant to be used all the time.</p> <p>The Reliability Panel's report shows we are starting to see falling system strength at the fringes of the grid in north Queensland, south-west NSW, north-west Victoria and continuing weakness in South Australia.</p> <p>In 2017-2018 AEMO issued 100 directions to keep the system stable in South Australia, compared with only eight in 2016-2017.</p> <p>Two years ago the AEMC made new rules to make networks provide the minimum level of system strength determined by AEMO. As a result, new synchronous condensers are due to be commissioned in South Australia in 2020. When that happens the need for very frequent directions to maintain system strength in South Australia will hopefully come to an end.</p> <p>The AEMC has started an investigation into system strength and intervention mechanisms in the national electricity market to check-in on how the new framework is working in the context of accelerating changes in the generation mix. Along with the AMPR report we released a consultation paper on system strength and intervention mechanisms which asked stakeholders for submissions on how the new process is working.</p> <p>Next steps: The Panel will monitor and review how AEMO and the AEMC's security and reliability work programs progress over the coming year, with a view to recommending in the 2019 annual market performance review whether any further work remains to be done or if there are key issues that need to be addressed.</p>
<p>Review of the frequency operating standard</p>	<p>Under the National Electricity Rules, AEMO must keep the power system stable and securely operating at a frequency close to 50 hertz. The specific frequency requirements that AEMO must meet under different power system conditions are set out in the frequency operating standard, which is determined by the Reliability Panel.</p> <p>This review is an integrated part of the AEMC's system security work program. It is investigating the appropriateness of the settings in the standard, in light of the ongoing energy market transformation as conventional synchronous generation leaves the market and non-synchronous generation such as wind and solar panels enters the market.</p>	<p>Stage one of the <i>Review of the frequency operating standard</i>, completed in November 2017, set a new frequency operating standard that gives clearer guidance on how frequency should be controlled during extreme events.</p> <p>Stage two addressed a number of issues identified in stage one including clarification of the scope of the limit that applies in the standard for Tasmania on the size of the largest generation event. The revised standard also includes revisions that remove duplication and improve the clarity of the obligations it places on AEMO to manage the power system frequency.</p> <p>This review is an integrated part of the AEMC's frequency control work plan which sets out a series of actions that are being progressed by the AEMC, AEMO and the AER in relation to frequency control.</p> <p>Next steps: The revised frequency operating standard will take effect on 1 January 2020 to allow for affected parties to make arrangements to adjust to the revised requirements.</p>

Review name	Overview	Expected benefits/impacts from recommendations
 <p>Request for declaration of protected event</p>	<p>In March 2017 the AEMC released a new management framework for emergency frequency control schemes. These are last line of defence mechanisms to help prevent system-wide blackouts.</p> <p>As part of this framework, AEMO is required to regularly and transparently assess risks to power system operation caused by events that are unlikely but would have high impacts if they were to happen.</p> <p>If AEMO believes that there are more transparent and cost-effective ways of managing any of the risks it identifies in its Power System Frequency Risk Review, it can request that the Reliability Panel declare a risk as a protected event.</p> <p>In November 2018, AEMO submitted a request to the Reliability Panel, seeking to declare the risk to South Australia's power system from destructive winds as a protected event. Under the National Electricity Rules, the Panel can declare a protected event if it finds there are net economic benefits from AEMO taking certain pre-emptive actions to manage a particular risk.</p>	<p>In 2018 AEMO released its first power system frequency risk review. This review identified a heightened risk of faults on transmission lines in South Australia during very high winds - above 140 km per hour - which could lead to the loss of the Heywood interconnector between South Australia and Victoria, and possibly a widespread blackout.</p> <p>AEMO is currently managing this risk by constraining the amount of power being imported into South Australia on the interconnector when destructive winds are forecast. However, AEMO believes there are more transparent and cost-effective ways to manage this risk, including by upgrading the technology used in existing emergency control schemes. These schemes employ various actions to respond to such events, including the rapid injection of power from batteries in South Australia.</p> <p>The Reliability Panels final determination declared the risk to South Australia's power system posed by destructive wind conditions as a protected event. After assessing AEMO's request, the Panel determined there are net economic benefits from AEMO taking additional pre-emptive action to manage the relevant risk to the power system.</p> <p>The Panel also agreed that AEMO's recommended option for managing the protected event is the most technically robust and cost-efficient of the options identified.</p> <p>Next steps: AEMO will implement the proposed upgrades to the System Integrity Protection Scheme (SIPS), an emergency frequency control scheme designed to reduce the likelihood that a loss of multiple generators in South Australia will lead to separation and a black system.</p>

Table K
Market reviews and advice completed

Review name	Overview	Expected benefits/impacts from recommendations
 Review of the system black event in South Australia on 28 September 2016	<p>The COAG Energy Council's terms of reference for this review direct the AEMC to build on the work conducted by the AER and AEMO, focussed on the compliance of market participants with requirements in the National Electricity Law and the National Electricity Rules, and technical issues contributing to the system black event that occurred in South Australia on 28 September 2016.</p> <p>The AEMC is required to provide a report to the COAG Energy Council within six months of the completion of both AEMO and the AER's reports.</p>	<p>COAG Energy Council's terms of reference for the review require the AEMC to draw upon AEMO and AER's findings into the black system event. With the publication of both the AEMO incident report (in March 2017) and the AER pre- and post-event compliance report (in December 2018) the AEMC has commenced its review as required by COAG Energy Council.</p> <p>We published an issues and approach paper in April 2019 which addressed systemic issues arising from the South Australian black system event including:</p> <ul style="list-style-type: none"> • contingency classification and the pre-event management of risks to power system security • system restoration following the black system event • market suspension, and • arrangements to enhance power system resilience to high impact low probability events. <p>The AER has not yet published a compliance report or issued any findings related to the black system event period itself. The AEMC will defer consideration of the black system event period itself, until such time as the AER has publicly reported or otherwise issued findings on compliance during this period.</p> <p>Next steps: We will publish a draft report in mid-September and a final report in December 2019.</p>
 NSW embedded networks and stand-alone systems advice	<p>The NSW Government has asked the AEMC to provide advice on jurisdictional issues related to the regulation of embedded networks and stand-alone power systems.</p>	<p>We have conducted a gap analysis of existing NSW regulatory frameworks related to embedded networks and stand-alone power systems and provide advice to inform the design of an appropriate framework.</p> <p>Any further work will be agreed with the NSW Department of Planning, Industry and Environment.</p>

Review name	Overview	Expected benefits/impacts from recommendations
 <p>Review of the regulatory frameworks for stand-alone power systems</p>	<p>This review, requested by the COAG Energy Council, is looking at the law and rule changes required to allow local distribution network service providers to use stand-alone power systems (SAPS) where it is economically efficient to do so, while maintaining appropriate consumer protections and service standards. The review is also considering regulatory arrangements for SAPS that are provided by parties other than local DNSPs.</p> <p>The terms of reference set out two priority areas of work:</p> <ul style="list-style-type: none"> • develop a national framework to facilitate the transition of grid-connected customers to a stand-alone power system supply provided by the current DNSP, and a mechanism for the transition of grid-connected customers to a third party SAPS supply (Priority 1) • develop a national framework for the ongoing regulation of third-party SAPS (Priority 2). 	<p>A stand-alone power system is an electricity supply arrangement that is not physically connected to the national grid. The term encompasses both microgrids, which supply electricity to multiple customers, and individual power systems, which supply electricity to a single customer.</p> <p>While consumers can currently go off-grid they do so at their own expense and in most cases have very limited consumer protections.</p> <p>In May 2019 we published a final report for Priority 1 recommending a range of regulatory changes to enable distribution network businesses to supply their customers with stand-alone power systems where it is cheaper than maintaining a connection to the grid.</p> <p>A stand-alone power system - usually a combination of solar PV, batteries and a back-up generator - would be installed by their distribution network but would not be physically connected to the national grid.</p> <p>The reforms would provide consumers with better, cheaper power services and the same protections, reliability standards and access to competitive retail offers via their retailer of choice as those connected to the grid.</p> <p>Reducing the need for poles and wires to service remote consumers decreases the network costs which make up around 50 per cent of the average electricity bill. It also reduces bushfire risk and the visual impacts of power lines.</p> <p>In late June, we published a draft report on Priority 2 of the review. Our proposed framework would require community groups, local councils, developers and other third party providers of stand-alone power systems to comply with jurisdictional regulations on reliability, safety and consumer protections, based on nationally agreed principles.</p> <p>The changes would enable those living in remote locations without easy access to the grid, or who wish to disconnect from the grid, to choose an off-grid solution while still having consumer protections in place for things like billing arrangements, reliability and safety standards.</p> <p>The AEMC is recommending a tiered framework that provides appropriate consumer protections while avoiding unnecessary costs, rather than a one-size-fits-all approach.</p>

Next steps: We are reviewing stakeholder feedback on the draft report. The final report will be published in October 2019.

Table L

Market reviews and advice current at 30 June 2019

Review name	Overview	Expected benefits/impacts from recommendations
 <p>Electricity network economic regulatory framework review 2019</p>	<p>The annual review of the economic regulatory framework for electricity networks is part of the AEMC's work to support the continual evolution of the energy sector.</p> <p>In light of the significant growth in decentralised energy resources, the review will examine whether the economic regulatory framework is robust, flexible and continues to support the efficient operation of the energy market in the long-term interest of consumers.</p> <p>We do this by monitoring changes and developments in the national electricity market and where necessary, recommend changes to the economic regulatory framework to the COAG Energy Council.</p>	<p>The AEMC's annual economic regulatory framework review is conducted under a standing terms of reference from the COAG Energy Council.</p> <p>This review considers whether the economic regulatory framework for network service providers is robust and flexible enough to support the long-term interest of consumers in a future environment of increased decentralised energy supply.</p> <p>For the 2019 review, a major area of consideration is how the increasing uptake of distributed energy resources (DER) is changing the use of the electricity networks, and how the regulatory framework can facilitate consumers' use of DER while keeping the total cost of the electricity system to the minimum.</p> <p>The AEMC has been consulting extensively with stakeholders on both current and emerging issues, and on the extent to which reforms to areas such as distribution access, connections and pricing could improve outcomes for consumers.</p>
 <p>Coordination of generation and transmission investment implementation - access and charging</p>	<p>In response to the AEMC's recommendations in the final report for the <i>Optional firm access, design and testing</i> review, the COAG Energy Council has asked the AEMC to implement a biennial regime to report on drivers of change that impact transmission and generation investment.</p> <p>The AEMC will undertake a two-stage approach to reporting.</p> <p>At least every two years we will publish a stage one report consisting of a high-level analysis of whether drivers in the NEM have changed substantially such that a more detailed examination of the conditions is warranted.</p> <p>Where a second stage is required, the AEMC will conduct an in-depth assessment of how the driver(s) have changed.</p>	<p>We started this review in March 2019 and in June we set the direction for urgently needed reform of the way generators access transmission networks to deliver electricity for consumers. The proposed reforms address the need for greater certainty for generators that they can get their energy to consumers, and reduce the financial and risk burden on consumers in funding new transmission investment.</p> <p>We are proposing new measures to give generators the option to pay for firm access rights to the transmission network. The reforms include introducing dynamic regional pricing to better reflect the costs associated with electricity supply from different locations; creating transmission hedges to enable generators to manage price risks and aligning transmission planning and operation to generation supply and consumer demand.</p> <p>Our technical working group of experts from industry, market bodies and consumer groups are providing technical input into the development and assessment of the proposed reforms.</p> <p>The transforming generation fleet has implications for investment in the transmission network, and the COGATI reforms are required to better coordinate investment in these two areas, and for lower system costs for consumers.</p>

Next steps: We will publish a final report in December 2019.

Review name	Overview	Expected benefits/impacts from recommendations
 <p>Investigation into intervention mechanisms and system strength in the NEM</p>	<p>The AEMC initiated this review of the interventions framework in light of the growing number of directions being issued by AEMO to maintain system strength and the recent use of the reliability and emergency reserve trader.</p> <p>The review will also progress two rule requests submitted by AEMO which seek to amend the interventions and related compensation frameworks.</p>	<p>The transformation of the electricity system is continuing to accelerate, which is presenting opportunities and challenges, including for the management of power system strength.</p> <p>In light of the increased use of interventions, our July 2018 <i>Reliability Frameworks Review</i> final report recommended a review of the appropriateness of the interventions framework and the cost implications of the compensation framework associated with it.</p> <p>The Reliability Panel's 2018 annual market performance review noted that AEMO is issuing a growing number of directions to synchronous generators in South Australia to maintain adequate system strength. The intervention framework - which includes directions, instructions and the reliability and emergency reserve trader - has always been available to AEMO to keep the lights on.</p> <p>But while the intervention framework provides an important stop gap, it is not without costs and is not intended to be used to provide ongoing maintenance of power system security.</p> <p>System strength interventions affect market signals to investors and the energy costs faced by consumers.</p> <p>We will also consult on how well the existing frameworks accommodate emerging system strength issues in other regions. We intend to explore whether adjustments could be made to existing frameworks to improve their timely and flexible application as we address the challenge of declining system strength across the national electricity market.</p> <p>Next steps: In August 2019 we published a draft interventions report and two draft determinations for the related rule requests. A draft report on system strength will be released in October.</p>
 <p>Generator compliance template review - 2019</p>	<p>To maintain power system security in the national electricity market, generators must comply with the relevant technical standards. The template provides clarity on what constitutes good electricity industry practice with respect to technical standard compliance and assists generators with developing and designing their compliance programs.</p> <p>The AEMC has issued terms of reference to the Reliability Panel to conduct a review of the template for generator compliance programs.</p>	<p>This review will focus on adjusting the generator compliance template to incorporate changes made by the AEMC in its 2018 <i>Generator technical performance standards</i> rule change, and to reflect changes in technology, cost, stakeholder experiences, and any other factors relevant to compliance of generators with their technical requirements.</p> <p>The Panel initiated the review and published an information sheet in April 2019 and has engaged GHD to conduct a survey of generator experiences with the existing template.</p> <p>Next steps: The Reliability Panel published a draft report in September 2019.</p>

Table L

Market reviews and advice current at 30 June 2019

Review name	Overview	Expected benefits/impacts from recommendations
 Definition of unserved energy	<p>In the National Electricity Rules, unserved energy is a measure of the amount of customer demand that cannot be supplied within a region due to a shortage of generation, demand-side participation or interconnector capacity.</p> <p>The reliability standard, which guides how much capacity is needed in the national electricity market, is expressed in terms of unserved energy. Under the reliability standard, unserved energy must not be more than 0.002 per cent of the total energy demanded in a given year.</p>	<p>In this review, the Panel is seeking to clarify and simplify the definition of unserved energy used in post-event analysis of wholesale supply interruptions.</p> <p>This will involve examining what should be included or excluded from the calculation of unserved energy when evaluating whether the reliability standard has been met. This could provide clearer and more accurate information to the market about whether the reliability standard was met, and hence if and where more capacity may be needed.</p> <p>The Panel published a consultation paper in April 2019, seeking stakeholder feedback on whether or not the current definition remains fit for purpose, the clarity of the existing definition, and the types of events that should be included or excluded from the calculation.</p>
 Review of the reliability and emergency reserve trader	<p>The RERT is the national electricity market's emergency reserve and is used by the system operator AEMO as a last-resort mechanism to keep the lights on. The RERT guidelines provide additional guidance to AEMO on what to take into account when it uses the RERT.</p> <p>In light of the tight implementation timeframes associated with the final <i>Enhancement to the RERT rule</i>, the scope of this review is limited to amending the guidelines so that they are consistent with the final rule.</p>	<p>In May 2019, the AEMC published new rules to enhance the RERT framework so that AEMO has the flexibility to effectively protect the reliability of the national electricity market while minimising costs to consumers.</p> <p>As part of the new RERT rules, the Panel is required to update its RERT guidelines, which provide additional guidance to AEMO on how to operate the emergency reserve framework.</p> <p>The Panel will undertake a comprehensive review of the RERT guidelines once the enhanced RERT framework has been used.</p>



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FINANCIAL PERFORMANCE

LEFT TO RIGHT: CORPORATE ACCOUNTANTS TINA TRUONG
AND CINDY YANG WITH TRICIA KHOO, THE AEMC'S
FINANCIAL CONTROLLER

FINANCIAL PERFORMANCE

Report of the Auditor-General

INDEPENDENT AUDITOR'S REPORT



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To the Chairperson Australian Energy Market Commission

As required by section 31(1)(b) of the *Public Finance and Audit Act 1987* and section 26(2) of the *Australian Energy Market Commission Establishment Act 2004*, I have audited the financial report of the Australian Energy Market Commission (the Commission) for the financial year ended 30 June 2019.

Opinion

In my opinion, the accompanying financial report gives a true and fair view of the financial position of the Australian Energy Market Commission as at 30 June 2019, its financial performance and its cash flows for the year then ended in accordance with the Treasurer's Instructions issued under the provisions of the *Public Finance and Audit Act 1987* and Australian Accounting Standards.

The financial report comprises:

- a Statement of Comprehensive Income for the year ended 30 June 2019
- a Statement of Financial Position as at 30 June 2019
- a Statement of Changes in Equity for the year ended 30 June 2019
- a Statement of Cash Flows for the year ended 30 June 2019
- notes, comprising significant accounting policies and other explanatory information
- a Certificate from the Chairperson, Acting Chief Executive and the Financial Controller.

Basis for opinion

I conducted the audit in accordance with the *Public Finance and Audit Act 1987* and Australian Auditing Standards. My responsibilities under those standards are further described in the 'Auditor's responsibilities for the audit of the financial report' section of my report. I am independent of the Commission. The *Public Finance and Audit Act 1987* establishes the independence of the Auditor-General. In conducting the audit, the relevant ethical requirements of APES 110 *Code of Ethics for Professional Accountants* have been met.

I believe that the audit evidence obtained is sufficient and appropriate to provide a basis for my opinion.

Responsibilities of the Chief Executive and the Commissioners for the financial report

The Chief Executive is responsible for the preparation of the financial report that gives a true and fair view in accordance with the Treasurer's Instructions issued under the provisions of the *Public Finance and Audit Act 1987* and Australian Accounting Standards, and for such internal control as management determines is necessary to enable the preparation of the financial report that gives a true and fair view and that is free from material misstatement, whether due to fraud or error.

The Commissioners are responsible for overseeing the entity's financial reporting process.

Auditor's responsibilities for the audit of the financial report

My objectives are to obtain reasonable assurance about whether the financial report as a whole is free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes my opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Australian Auditing Standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of this financial report.

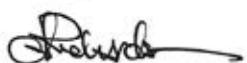
As part of an audit in accordance with Australian Auditing Standards, I exercise professional judgement and maintain professional scepticism throughout the audit. I also:

- identify and assess the risks of material misstatement of the financial report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for my opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control
- obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Commission's internal control
- evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the Chief Executive
- evaluate the overall presentation, structure and content of the financial report, including the disclosures, and whether the financial report represents the underlying transactions and events in a manner that achieves fair presentation.

FINANCIAL PERFORMANCE

My report refers only to the financial report described above and does not provide assurance over the integrity of electronic publication by the entity on any website nor does it provide an opinion on other information which may have been hyperlinked to/from the report.

I communicate with the Chief Executive and the Commission about, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that I identify during the audit.



Andrew Richardson
Auditor-General
25 September 2019

Certification of the financial statements

Australian Energy Market Commission

Certification of the Financial Statements

We certify that the financial statements of the Australian Energy Market Commission ("the Commission"):

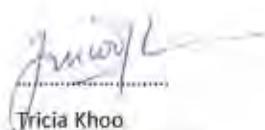
- comply with relevant Treasurer's Instructions issued under section 41 of the *Public Finance and Audit Act 1987*, and relevant Australian Accounting Standards;
- are in accordance with the accounts and records of the Commission; and
- present a true and fair view of the financial position of the Commission as at 30 June 2019 and the result of its operations and cash flows for the financial year.

We certify that the internal controls employed by the Commission for the financial year over its financial reporting and its preparation of the financial statements have been effective throughout the reporting period.



Suzanne Falvi

Acting Chief Executive



Tricia Khoo

Financial Controller



John Pierce

Chairperson

Date: 23 September 2019

Statement of comprehensive income

For the year ended 30 June 2019

	Note	2019 \$'000	2018 \$'000
Expenses			
Employee benefits expenses	6	18,036	15,898
Supplies and services	9	8,419	9,244
Depreciation and amortisation expense	10	414	330
Net loss on disposal of non-current assets	11	14	1
Total expenses		26,883	25,473
Income			
Interest	12	216	185
Other income	13	904	1,572
Total income		1,120	1,757
Net cost of providing services		(25,763)	(23,716)
Revenues from Government			
Contributions from participating jurisdictions	14	28,889	24,409
Net result		3,126	693
Total comprehensive result		3,126	693

The accompanying notes form part of these financial statements. The net result and total comprehensive result are attributable to the participating jurisdictions as owners.

Statement of financial position

For the year ended 30 June 2019

	Note	2019 \$'000	2018 \$'000
Current assets			
Cash and cash equivalents	15	17,127	13,623
Receivables	16	1,136	591
Total current assets		18,263	14,214
Non-current assets			
Plant and equipment	17	851	991
Intangible assets	18	1,302	1,040
Total non-current assets		2,153	2,031
Total assets		20,416	16,245
Current liabilities			
Payables	19	1,084	1,130
Employee benefits	20	1,166	1,215
Other liabilities	21	3,256	2,374
Total current liabilities		5,506	4,719
Non-current liabilities			
Payables	19	104	81
Employee benefits	20	999	765
Provisions	22	339	338
Total non-current liabilities		1,442	1,184
Total liabilities		6,948	5,903
Net assets		13,468	10,342
Equity			
Retained earnings		11,451	8,325
Contributed capital		2,017	2,017
Total equity	23	13,468	10,342
Unrecognised contractual commitments	24		
Contingent assets and liabilities	25		

The accompanying notes form part of these financial statements. The total equity is attributable to the participating jurisdictions as owners.

Statement of changes in equity

For the year ended 30 June 2019

	Note	Contributed capital \$'000	Retained earnings \$'000	Total equity \$'000
Balance at 1 July 2017		2,017	7,632	9,649
Net result for 2017-2018		-	693	693
Total comprehensive result for 2017-2018		-	693	693
Balance at 30 June 2018		2,017	8,325	10,342
Net result for 2018-2019		-	3,126	3,126
Total comprehensive result for 2018-2019		-	3,126	3,126
Balance at 30 June 2019	23	2,017	11,451	13,468

The accompanying notes form part of these financial statements. All changes in equity are attributable to the participating jurisdiction as owners.

Statement of cash flows

For the year ended 30 June 2019

	Note	2019 \$'000	2018 \$'000
Cash flows from operating activities			
Cash outflows			
Employee benefits payments		(17,608)	(15,377)
Payments for supplies and services		(9,814)	(10,196)
Payments for paid parental leave scheme		-	(31)
Cash used in operations		(27,422)	(25,604)
Cash inflows			
Receipts from participating jurisdictions		29,812	24,652
Other receipts		1,099	1,981
Interest received		190	187
GST recovered from the ATO		411	692
Receipts from paid parental leave scheme		-	31
Cash generated from operations		31,512	27,543
Net cash provided by operating activities		4,090	1,939
Cash flows from investing activities			
Cash outflows			
Purchase of property, plant and equipment		(124)	(703)
Purchase of intangibles		(462)	(836)
Cash used in investing activities		(586)	(1,539)
Net cash used in investing activities		(586)	(1,539)
Net increase in cash and cash equivalents		3,504	400
Cash and cash equivalents at the beginning of the period		13,623	13,223
Cash and cash equivalents at the end of the period		17,127	13,623

The accompanying notes form part of these financial statements.

Notes to the financial statements

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Notes to the financial statements

For the year ended 30 June 2019

1 Basis of financial statements

1.1 Reporting entity

The Commission is a body corporate established under South Australian law.

The Commission does not control any other entity and has no interests in unconsolidated structured entities. The Commission has not entered into any contractual arrangements which involve the sharing of control or significant influence over another entity.

The objectives and activities of the Commission are detailed in Note 2.

Additionally, since March 2018, the Commission continues to administer resources on behalf of the Energy Security Board ("ESB"). The ESB was established by the COAG Energy Council to coordinate the implementation of the reform blueprint produced by Australia's Chief Scientist, Dr Alan Finkel AO. The ESB will also provide whole-of-system oversight for energy security and reliability to drive better outcomes for consumers. The ESB Board comprises the independent Chair and Deputy Chair, together with the Chairs of the Commission, the Australian Energy Regulator, and the Chief Executive Officer of the Australian Energy Market Operator.

Transactions and balances relating to these administered resources are not recognised as the Commission's income, expenses, cash inflows or cash outflows, assets or liabilities. They are recognised as administered income, expenses, cash inflows, cash outflows, assets or liabilities under Note 28.

1.2 Statement of compliance

These financial statements have been prepared in compliance with section 23 of the *Public Finance and Audit Act 1987*.

The financial statements are general purpose financial statements. The accounts have been prepared in accordance with relevant Australian Accounting Standards (Reduced Disclosure Requirements) and comply with South Australian Treasurer's Instructions and Accounting Policy Statements promulgated under the provisions of the *Public Finance and Audit Act 1987*.

The Commission has applied Australian Accounting Standards that are applicable to not-for-profit entities, as the Commission is a not-for-profit entity. The Commission applies Tier 2 Australian Accounting Standards reporting requirements.

For the 2018-19 financial statements the Commission adopted AASB 9 – *Financial Instruments* and is required to comply with new Treasurer's Instructions (Accounting Policy Statements) issued on 22 March 2019. Further information is provided in Note 4.

1.3 Basis of preparation

The financial statements are prepared on a 12 month reporting period and presented in Australian currency. The historical cost convention is used unless a different measurement basis is specifically disclosed in the note associated with the item measured.

All amounts in the financial statements and accompanying notes have been rounded to the nearest thousand dollars (\$'000).

1.4 Taxation

The Commission is not subject to income tax. The Commission is liable for payroll tax, fringe benefits tax and goods and services tax (GST).

Income, expenses and assets are recognised net of the amount of GST except:

- when the GST incurred on a purchase of goods or services is not recoverable from the Australian Taxation Office (ATO), in which case the GST is recognised as part of the cost of acquisition of the asset or as part of the expense item applicable; and
- receivables and payables, which are stated with the amount of GST included.

The net amount of GST recoverable from, or payable to, the ATO is included as part of receivables or payables in the Statement of Financial Position.

Cash flows are included in the Statement of Cash Flows on a gross basis and the GST component of cash flows arising from investing and financing activities, which is recoverable from, or payable to, the ATO is classified as part of operating cash flows.

Notes to the financial statements

For the year ended 30 June 2019

2 Objectives and activities

2.1 Objectives

The Australian Energy Market Commission (“the Commission”) was established on 22 July 2004 pursuant to the *Australian Energy Market Commission Establishment Act 2004 (South Australia)*. The Commission operates in Australia from a single office in Sydney, NSW.

The Commission’s key functions under the AEMC Establishment Act, the National Electricity Law, National Gas Law, and the National Energy Retail Law, are to:

- a) consider rule change requests and make rule determinations;
- b) conduct market reviews on request of the Ministerial Council on Energy (“MCE”), or on the AEMC’s own initiative; and
- c) provide advice on request from the MCE.

2.2 Activities

The Commission undertakes the following activities:

- a) make and revise the energy rules;
- b) undertake reviews and provides advice to governments and others on improvements to regulatory and energy market arrangements;
- c) responsible for developing electricity guidelines and standards together with the Reliability Panel; and
- d) undertake major projects which may involve a combination of reviews and rule changes conducted over an extended period of time.

3 Summary of significant accounting policies

a) Comparative information

The presentation and classification of items in the financial statements are consistent with prior periods except where specific accounting standards and/or accounting policy statements have required a change.

b) Events after the reporting period

Adjustments are made to amounts recognised in the financial statements, where an event occurs after 30 June and before the date the financial statements are authorised for issue, where those events provide information about conditions that existed at 30 June.

Note disclosure is made about events between 30 June 2019 and the date the financial statements are authorised for issue where the events relate to a condition which arose after 30 June 2019 and which may have a material impact on the results of subsequent years. Refer to Note 27.

c) Income

Income is recognised to the extent it is probable that the flow of economic benefits to the Commission will occur and can be reliably measured.

Income has been aggregated according to its nature and has not been offset unless required or permitted by a specific accounting standard, or where offsetting reflects the substance of the transaction or other event.

The following are specific recognition criteria:

Contributions received from participating jurisdictions

The Commission’s funding is provided through contributions by the participating jurisdictions within the meaning of the National Electricity Law and the National Gas Law and the National Energy Retail Law. South Australia’s contribution to the Commission is an expense of the SA Government and not an inter-agency transaction.

Contributions are recognised as an asset and income when the Commission obtains control of the contributions or obtains the right to receive the contributions and the income recognition criteria are met (i.e. the amount can be reliably measured and the

Notes to the financial statements

For the year ended 30 June 2019

flow of resources is probable).

Generally, the Commission has obtained control or the right to receive for:

- Contributions with unconditional stipulations - this will be when the agreement becomes enforceable i.e. the earlier of when the receiving entity has formally been advised that the contribution has been approved; agreement/contract is executed; and/or the contribution is received.
- Contributions with conditional stipulations – this will be when the enforceable stipulations specified in the agreement occur or are satisfied; that is income would be recognised for contributions received or receivable under the agreement.

All contributions received by the Commission have been contributions with unconditional stipulations attached and have been recognised as an asset and income in the period in which they are earned.

d) Expenses

Expenses are recognised to the extent that it is probable that the flow of economic benefits from the Commission will occur and can be reliably measured.

Expenses have been aggregated according to their nature and have not been offset unless required or permitted by another accounting standard, or where offsetting reflects the substance of the transaction or other event.

The following are specific recognition criteria:

Employee benefits expenses

Employee benefits expenses include all costs related to employment including wages and salaries, non-monetary benefits and leave entitlements. These are recognised when incurred.

Superannuation

The amount charged to the Statement of Comprehensive Income represents the contributions made by the Commission to the superannuation plan in respect of current services of current Commission staff.

Depreciation and amortisation

All non-current assets, having a limited useful life, are systematically depreciated/amortised over their useful lives in a manner that reflects the consumption of their service potential. Amortisation is used in relation to intangible assets such as software, while depreciation is applied to tangible assets such as property, plant and equipment.

Asset residual values, useful lives and amortisation methods are reviewed and adjusted if appropriate on an annual basis.

Changes in the expected useful life or the expected pattern of consumption of future economic benefits embodied in the asset are accounted for prospectively by changing the time period or method, as appropriate, which is a change in accounting estimate. These have not changed.

Depreciation/amortisation is calculated on a straight-line basis over the estimated useful life of the following classes of assets:

Class of assets	Useful life (years)
Plant and equipment	3-20
Intangibles	4-5
IT infrastructure	3-5

Net gain / loss on disposal of non-current assets

Any gain/ (loss) on disposal of assets are recognised at the date control of the asset is passed to the buyer and are determined after deducting the written down value from the proceeds of the asset sale at the time.

Notes to the financial statements

For the year ended 30 June 2019

e) Current and non-current classification

Assets and liabilities are characterised as either current or non-current in nature. Assets and liabilities that are to be sold, consumed or realised as part of the normal operating cycle even when they are not expected to be realised within twelve months after the reporting date have been classified as current assets or current liabilities.

f) Assets

Assets have been classified according to their nature and have not been offset unless required or permitted by a specific accounting standard, or where offsetting reflects the substance of the transaction or other event.

Cash and cash equivalents

Cash and cash equivalents in the Statement of Financial Position and for the purposes of the Statement of Cash Flows, include cash at bank and cash on hand and in other short-term, highly liquid investments with maturities of six months or less that are readily converted to cash and which are subject to insignificant risk in changes in value.

Cash is measured at nominal value.

Receivables

Receivables include funding receivable, net GST input tax credits recoverable, interest receivable, prepayments and other accruals.

Receivables are generally settled within 30 days after issue of an invoice or the goods and services have been provided under a contractual arrangement. Receivables, prepayments and accrued revenues are non-interest bearing. Receivables are held with the objective of collecting the contractual cash flows and they are measured at amortised cost. Collectability of receivables is reviewed on an on-going basis.

Other than as recognised in the allowance for doubtful debts, it is not anticipated that counterparties will fail to discharge their obligations. The carrying amount of receivables approximates net fair value due to being receivable on demand. There is no concentration of credit risk.

Refer to Note 26 for further information on risk management.

Non-current assets

Acquisition and recognition

Non-current assets are initially recorded at cost plus any incidental cost involved with the acquisition. Non-current assets are subsequently measured at fair value less accumulated depreciation. All non-current tangible assets with a value equal to or in excess of \$2,000 are capitalised.

Revaluation of non-current assets

All non-current tangible assets are valued at written down current cost (a proxy for fair value); and revaluation of non-current assets or group of assets is only performed when its fair value at the time of acquisition is greater than \$1 million and estimated useful life is greater than three years. No revaluation was performed for the year ended 30 June 2019 as the Commission did not have non-current assets which met the revaluation criteria.

Impairment

All non-current tangible and intangible assets are tested for indication of impairment at each reporting date. Where there is an indication of impairment, the recoverable amount is estimated. The recoverable amount is determined as the higher of the asset's fair value less costs of disposal and depreciated replacement cost. An amount by which the asset's carrying amount exceeds the recoverable amount is recorded as an impairment loss.

Plant and equipment have not been assessed for impairment as they are non-cash generating assets, that are specialized in nature and held for continual use of their service capacity and are subject to regular revaluation.

Intangible assets

An intangible asset is an identifiable non-monetary asset without physical substance. Intangible assets are measured at cost. Following initial recognition, intangible assets are carried at cost less any accumulated amortisation and any accumulated impairment losses.

The useful lives of intangible assets are assessed to be either finite or indefinite. The Commission only has intangible assets with

Notes to the financial statements

For the year ended 30 June 2019

finite lives. The amortisation period and the amortisation method for intangible assets are reviewed on an annual basis.

The acquisition of, or internal development of software is capitalised when the expenditure meets the definition criteria (identifiably, control and the existence of future economic benefits) and recognition criteria (probability of future economic benefits and cost can be reliably measured) and when the amount of the expenditure is greater than or equal to \$2,000.

g) Liabilities

Liabilities have been classified according to their nature and have not been offset unless required or permitted by a specific accounting standard, or where offsetting reflects the substance of the transaction or other event.

Payables

Payables include creditors, accrued expenses, net GST payable, employment on-costs and Paid Parental Leave Scheme payable.

Creditors represent the amounts owing for goods and services received prior to the end of the reporting period that are unpaid at the end of the reporting period. Creditors include all unpaid invoices received relating to the normal operations of the Commission.

Accrued expenses represent goods and services provided by other parties during the period that are unpaid at the end of the reporting period and where an invoice has not been received.

The Paid Parental Leave Scheme payable represents amounts which the Commission has received from the Commonwealth Government to forward onto eligible employees via the Commission's standard payroll processes. That is, the Commission is acting as a conduit through which the payment to eligible employees is made on behalf of the Department of Human Services.

All payables are measured at their nominal amount, are unsecured and are normally settled within 30 days from the date of the invoice or date the invoice is first received. All payables are non-interest bearing. The carrying amount of payables represents fair value due to their short-term nature.

Employee benefit on-costs include payroll tax, workers compensation levies and superannuation contributions in respect to outstanding liabilities for salaries and wages, long service leave and annual leave.

The Commission makes contributions to several externally managed superannuation schemes on behalf of employees. These contributions are treated as an expense when they occur. There is no liability for payments to beneficiaries as they have been assumed by the respective superannuation schemes. The only liability outstanding at reporting date relates to any contributions due but not yet paid.

Leases

The determination of whether an arrangement is or contains a lease is based on the substance of the arrangement. The Commission has entered into operating leases.

Operating leases

The Commission has an operating lease for its office accommodation. Operating lease payments are recognised as an expense in the Statement of Comprehensive Income on a straight-line basis over the lease term. The straight-line basis is representative of the pattern of benefits derived from the leased asset.

Lease incentives

All incentives for the agreement of a new or renewed operating lease are recognised as an integral part of the net consideration agreed for the use of the leased asset. Incentives received to enter into operating leases are recognised as a liability. The aggregate benefits of lease incentives received by the Commission in respect of operating leases have been recorded as a reduction of rental expense over the lease term, on a straight-line basis.

Employee benefits

These benefits accrue for employees as a result of services provided up to the reporting date that remain unpaid. Long-term employee benefits are measured at present value and short-term employee benefits are measured at nominal amounts.

Notes to the financial statements

For the year ended 30 June 2019

Salaries, wages, annual leave and personal/carer's leave

The liability for salary and wages are measured as the amount unpaid at the reporting date at remuneration rates current at reporting date.

The annual leave liability is expected to be payable within 12 months and is measured at the undiscounted amount expected to be paid.

No provision has been made for personal/carer's leave as all personal/carer's leave is non-vesting and the average personal/carer's leave taken in future years by employees is estimated to be less than the annual entitlement for personal/carer's leave.

Long service leave

The liability for long service leave is measured as the present value of expected future payments to be made in respect of services provided by employees up to the end of the reporting period using the projected unit credit method. The estimated liability for long service leave is based on actuarial assumptions over expected future salary and wage levels, experience of employee departures and periods of service. These assumptions are based on employee data across South Australian Government entities.

Expected future payments are discounted using market yields at the end of the reporting period on government bonds with durations that match, as closely as possible, the estimated future cash outflows.

Current long service leave reflects the portion of leave expected to be settled within the next 12 months, based on previous experience, known applications for leave and notification from employees of their intention to take leave.

Provisions

Provisions are recognised when the Commission has a present obligation as a result of a past event, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation.

Provisions are measured at the present value of management's best estimate of the expenditure required to settle the present obligation at the reporting date. If the effect of the time value of money is material, provisions are discounted for the time value of money and the risks specific to the liability. The Commission has no requirement to recognise a workers compensation provision as workplace injuries are insured through iCare insurance (NSW), Zurich (ACT), WorkCover (QLD), EML (VIC) and Allianz West (WA).

Provision for make good

The Commission has recognised a provision for make good as a result of its obligation to return refurbished leasehold improvements to their original condition at the end of its operating lease for office accommodation.

h) Unrecognised contractual commitments and contingent assets and liabilities

Commitments include operating, capital and outsourcing arrangements arising from contractual or statutory sources are disclosed at their nominal value.

Contingent assets and contingent liabilities are not recognised in the Statement of Financial Position, but are disclosed by way of a note and, if quantifiable, are measured at nominal value.

Unrecognised contractual commitments and contingencies are disclosed net of the amount of GST recoverable from, or payable to, the Australian Taxation Office. If GST is not payable to, or recoverable from, the Australian Taxation Office, the commitments and contingencies are disclosed on a gross basis.

4 New and revised accounting standards and policies

4.1 Treasurer's Instructions (Accounting Policy Statements)

On 22 March 2019 the *Treasurer's Instructions (Accounting Policy Statements) 2019* were issued by the Treasurer under the Public

Notes to the financial statements

For the year ended 30 June 2019

Finance and Audit Act 1987. The Accounting Policy Statements replaced the following Accounting Policy Frameworks:

- Purpose and Scope
- General Purpose Financial Statements Framework
- Asset Accounting Framework
- Financial Asset and Liability Framework
- Income Framework
- Definitions

The new Accounting Policy Statements have largely been prepared on a no-policy change basis. Changes that impact on these financial statements are:

- removal of the additional requirement to report a statement of equity for administered items
- increasing the bands from \$10,000 to \$20,000 for employee and board member reporting.

These changes, however, do not impact on the amounts reported in the financial statements.

The Accounting Policy Statements also set out requirements in relation to Accounting Standards and Statements not yet effective. This is further discussed in Note 4.3 and Note 4.4.

4.2 AASB 9 Financial instruments

AASB 9 *Financial Instruments* replaces the provisions of AASB 139 that relate to recognition, classification and measurement of financial assets and financial liabilities, derecognition of financial instruments, impairment of financial assets and hedge accounting.

As part of the adoption of AASB 9, the Commission adopted consequential amendments to other accounting standards and the Treasurer's Instructions (Accounting Policy Statements) arising from the issue of AASB 9 as follows:

- *AASB 7 Financial Instruments: Disclosures* requires amended disclosures due to changes arising from AASB 9, these disclosures have been provided for the current year because the comparatives have not been restated.

In accordance with transitional provisions and the *Treasurer's Instructions (Accounting Policy Statements)*, AASB 9 *Financial Instruments* was adopted without restating comparative information for classification and measurement requirements.

The adoption of AASB 9 has not had a significant effect on the recognition, measurement or classification of financial liabilities.

On 1 July 2018, the Commission has assessed and reclassified its financial assets into the appropriate AASB 9 categories depending on the business model and contractual cash flow characteristics applying to the asset.

Reclassification of financial instruments on adoption of AASB 9

On the date of initial application, The Commission's financial instruments were as follows, with any reclassifications noted. There were no changes to the carrying amount at 1 July 2018.

Measurement category

	AASB 139	AASB 9
Current financial assets		
Receivables	Loans and receivables	Amortised cost
Current financial liabilities		
Payables	Amortised cost	Amortised cost

Notes to the financial statements

For the year ended 30 June 2019

Impairment of financial asset

AASB 9 replaces the ‘incurred loss’ model in AASB 139 with an ‘expected credit loss’ model. The Commission’s financial assets for trade receivables from provision of services are subject to AASB 9’s new expected credit loss model.

Trade receivables

New impairment requirements result in a provision being applied to all receivables rather than only on those receivables that are credit impaired. The Commission has adopted the simplified approach under AASB 9 Financial Instruments and measured lifetime expected credit losses on all trade receivables using a provision matrix approach as a practical expedient to measure the impairment provision. The Commission has determined that there is a nil lifetime expected credit loss on the trade receivables of the Commission.

Trade and other receivables that were classified as loans and receivables under AASB 139 are now classified at amortised cost as they meet the appropriate criteria under AASB 9.

4.3 AASB 15 - Revenue from Contracts with Customers and AASB 1058 - Income of Not for Profit Entities

AASB 15 establishes the principles that the Commission shall apply to report useful information to users of financial information about the nature, amount, timing and uncertainty of revenue and cash flows arising from a contract with a customer.

AASB 1058 introduces consistent requirements for the accounting of non-reciprocal transactions by not-for-profit entities, in conjunction with AASB 15. These requirements closely reflect the economic reality of not-for-profit entity transactions that are not contracts with customers. AASB 1058 replaces parts of AASB 1004 – Contributions.

AASB 15 and AASB 1058 apply to annual reporting periods beginning on or after 1 January 2019. Accordingly, the application date for the Commission is 1 July 2019.

The Commission has assessed the impact of the application of AASB 15 and AASB 1058, and they are not expected to have a material impact on the timing and recognition of revenue of the Commission.

4.4 AASB 16 - Leases

AASB 16 sets out a comprehensive model for lease accounting that address recognition, measurement, presentation and disclosure of leases. The outcome will be that lease information disclosed will give users of financial statements a basis to assess the effect that leases have on the financial position, financial performance and cash flows of an entity.

AASB 16 applies to annual reporting periods beginning on or after 1 January 2019. Accordingly, the application date for the Commission is 1 July 2019.

The Commission has assessed the impact of the application of AASB 16 to the existing lease (noting that the Commission has a right for early termination, refer to Note 24.3), and it is not expected to have a material impact on the Commission. However, the new office accommodation lease arrangements which will take effect from 2019-2020 will have a material impact on the Commission. At present, no lease has been signed and therefore the financial impact of this cannot be quantified.

5 Economic dependency

The continued existence of the Commission in its present form is dependent on Government policy in each of the jurisdictions who fund the Commission, and the Commonwealth Government. The Commission is unable to borrow funds and retains capital and cash reserves sufficient to meet the majority of its liabilities and unrecognised contractual commitments.

To assist with revenue certainty, in January 2019 the Council of Australian Governments’ Energy Council advised the approval of funding of \$30.862m for 2019-20.

Notes to the financial statements

For the year ended 30 June 2019

6 Employee benefits

6.1 Employee benefits expenses

	2019 \$'000	2018 \$'000
Salaries and wages	14,282	12,510
Long service leave	291	219
Annual leave	1,200	1,130
Employment on-costs - superannuation	1,324	1,250
Payroll and Fringe Benefits Tax	932	789
Relocation expenses	7	-
Total employee benefit expenses	18,036	15,898

Employees are appointed under common law contracts and are not employees under the South Australian Public Sector Act 2009. Commissioners are appointed by the Governor of South Australia on the recommendation of the Minister following nomination by the Ministerial Council on Energy or the Commonwealth as appropriate in accordance with the Australian Energy Market Establishment Act 2004.

6.2 Remuneration of employees

The number of employees whose remuneration received or receivable falls within the following bands:	2019 No	2018 No
\$149,000 – \$151,000*	-	1
\$151,001 – \$171,000	7	7
\$171,001 – \$191,000	3	10
\$191,001 – \$211,000	9	7
\$211,001 – \$231,000	13	5
\$231,001 – \$251,000	1	-
\$271,001 – \$291,000	2	1
\$291,001 – \$311,000	1	2
\$311,001 – \$331,000	1	3
\$331,001 – \$351,000	1	-
\$351,001 – \$371,000	1	-
\$431,001 – \$451,000	-	1
\$471,001 - \$491,000	1	-
Total number of employees	40	37

*This band has been included for the purposes of reporting comparative figures based on the executive base level remuneration rate for 2017-18.

The table includes all employees who received remuneration equal to or greater than the base executive remuneration level during the year, as established by the South Australia Department of Treasury and Finance.

Remuneration of employees reflects all costs of employment including salaries and wages, payments in lieu of leave, superannuation contributions, salary sacrifice benefits and fringe benefits and any net fringe benefits tax paid or payable in respect of those benefits. The total remuneration received by these employees for the year was \$8,969,000 (2018: \$7,916,000).

Notes to the financial statements

For the year ended 30 June 2019

7 Remuneration of Commissioners

The following persons held the position of Commissioner during the financial year:

John Pierce (Chair)

Brian Spalding (retired 18 April 2019)

Charles Popple

Allison Warburton

Michelle Shepherd

The number of Commissioners whose remuneration received or receivable falls within the following bands:	2019 No	2018 No
\$0 - \$19,999	-	1
\$80,000 - \$99,999	-	2
\$160,000 - \$179,999	-	1
\$200,000 - \$219,999	-	1
\$260,000 - \$279,000	2	-
\$300,000 - \$319,999	1	-
\$320,000 - \$339,999	1	-
\$580,000 - \$599,999	-	1
\$600,000 - \$619,999	1	-
Total number of Commissioners	5	6

Remuneration of Commissioners reflects all costs of performing Commission member duties including sitting fees, salaries and wages, superannuation contributions, salary sacrifice benefits and fringe benefits and any net fringe benefits tax paid or payable in respect of those benefits. The total remuneration received or receivable by Commissioners for the year was \$1,806,000 (2018: \$1,178,000).

Remuneration of committee members

Committee Members during the 2018-19 financial year were:

Audit and Risk Management Committee

Jim Mitchell (Chair) (re-appointed 28 May 2019)

Jane Byrne (re-appointed 28 May 2019)

Allison Warburton

Reliability Panel

Brian Spalding (Chair) (retired 18 April 2019)

Charles Popple (appointed 19 April 2019, as Chair)

	2019 No	2018 No
The number of committee members whose remuneration received or receivable falls within the following bands:		
\$0-\$19,999	2	2
Total number of members	2	2

Notes to the financial statements

For the year ended 30 June 2019

Remuneration of committee members reflects all costs of performing committee member duties including sitting fees, salaries and wages, superannuation contributions, salary sacrifice benefits and fringe benefits and any net fringe benefits tax paid or payable in respect of those benefits. The total remuneration received or receivable by committee members for the year was \$21,000 (2018: \$15,000).

8 Related party transactions

The Commission is a statutory authority established pursuant to the *Australian Energy Market Commission Establishment Act 2004*.

The Commission is not owned or controlled by the South Australian Government. Related parties of the Commission include all key management personnel, their close family members and any entities controlled by those persons.

Key management personnel

Key management personnel of the authority include the Commissioners, the Chief Executive and six members of the senior management team who have responsibility for the strategic direction and management of the Commission.

Total compensation for the Commission's key management personnel is \$4,281,000 (2018: \$3,613,000).

Transactions with key management personnel and other related parties

Apart from the transactions below, there were no other transactions with key management personnel or other related parties in the financial year:

- During the financial year, a 3 week internship in the People and Culture team was offered to Ms Merryn Popple, which was completed on 8th February 2019. Ms Popple is a related party of Mr Charles Popple (Commissioner). The total remuneration paid to Ms Popple, during the financial year, with respect to the internship, was \$3,000.
- During the financial year, a 10 week internship in the Strategy and Economic Analysis team was offered to Mr Charles Goodlad, which was completed on 8th February 2019. Mr Goodlad is a related party of Mr John Pierce (Chairman). The total remuneration paid to Mr Goodlad, during the financial year, with respect to the internship, was \$4,000.

9 Supplies and services

	2019 \$'000	2018 \$'000
Property expenses^	1,685	1,708
Information technology expenses	1,345	993
Accounting, legal and audit expenses	307	409
Project contractor and consultancy expenses [#]	2,157	2,882
Other contractor and consultancy expenses	317	840
Project support expenses*	705	672
General office administration expenses	217	204
Travel and accommodation expenses	845	650
Recruitment expenses	282	233
Staff training expenses	390	552
Other staff related expenses	169	101
Total supplies and services	8,419	9,244

[^] Includes operating lease payments, which are recognised as an expense on a straight-line basis over the lease term, as it is representative of the pattern of benefits derived from the leased assets. These payments totalled \$1,188,000 (2018: \$1,186,000).

[#] Includes professional services such as economic advice, modelling, and legal advice directly related to project work on rule changes, market reviews and expert panels.

* Includes stakeholder communication, venue hire, research data and statutory advertising directly related to project work on rule changes, market reviews and expert panels.

Notes to the financial statements

For the year ended 30 June 2019

	2019 No	\$'000	2018 No	\$'000
The number and dollar amount paid/payable in total to each consultant that fell within the following bands:				
Below \$10,000	3	3	4	11
Above \$10,000	19	2,084	24	3,137*
Total paid/payable to the consultants engaged	22	2,087	28	3,148

* In the prior year, these amounts included fees for various modelling and advice relating to the ESB, which totalled \$405,000. These fees were recovered from the Department of the Environment and Energy and disclosed under 'Other Revenues'. Accordingly, excluding these recovered amounts, 23 consultants were engaged in the prior year, which totalled to \$2,743,000.

10 Depreciation and amortisation expense

	2019 \$'000	2018 \$'000
Plant and equipment	121	18
IT infrastructure	131	150
Intangible assets	162	162
Total depreciation and amortisation	414	330

11 Net loss on disposal/write-off of non-current and other assets

	2019 \$'000	2018 \$'000
Plant and equipment		
Proceeds from disposal	-	-
Less net book value of assets disposed	5	1
Net loss from write-off of plant and equipment	5	1
IT infrastructure		
Proceeds from disposal	-	-
Less net book value of assets disposed	9	-
Net loss from write-off of IT infrastructure assets	9	-
Total assets		
Total proceeds from disposal	-	-
Less total value of assets disposed	14	1
Total net loss from disposal of assets	14	1

Notes to the financial statements

For the year ended 30 June 2019

12 Interest revenues

	2019 \$'000	2018 \$'000
Cash and cash equivalents	216	185
Total interest revenue	216	185

13 Other revenues

	2019 \$'000	2018 \$'000
Recovery of project and staff secondment costs	904	1,572
Total other revenues	904	1,572

14 Contributions from participating jurisdictions

	2019 \$'000	2018 \$'000
Operational funding	28,889	24,409
Total contributions from participating jurisdictions	28,889	24,409

15 Cash and cash equivalents

	2019 \$'000	2018 \$'000
Cash at bank and on hand	10,296	7,304
Short-term deposits	6,831	6,319
Total cash and cash equivalents	17,127	13,623

Short-term deposits

Short-term deposits are made for varying periods of three months and six months. The deposits are lodged with the ANZ bank and earn interest at the respective short-term deposit rates.

16 Receivables

	2019 \$'000	2018 \$'000
Current		
Interest receivable	67	40
Prepayments	641	368
GST input tax recoverable	378	-
Other receivables	50	183
Total receivables	1,136	591

Notes to the financial statements

For the year ended 30 June 2019

17 Plant and equipment

	2019 \$'000	2018 \$'000
Plant and equipment, at cost (deemed fair value)	759	205
Accumulated depreciation at the end of the period	(215)	(101)
Total plant and equipment	544	104
Work in progress	-	533
Total plant and equipment and work in progress	544	637
IT infrastructure, at cost (deemed fair value)	916	1,017
Accumulated depreciation at the end of the period	(643)	(710)
Total IT infrastructure	273	307
Work in progress	34	47
Total IT infrastructure and work in progress	307	354
Total plant and equipment	851	991

All plant and equipment assets are classified as a level 2 asset for the purposes of the fair value hierarchy.

Impairment

There were no indications of impairment of plant and equipment at 30 June 2019.

Reconciliation of property, plant and equipment

The following table shows the movement of property, plant and equipment during 2019.

Notes to the financial statements

For the year ended 30 June 2019

	2019 \$'000	2018 \$'000
Plant and equipment		
Carrying amount at beginning of the period	104	124
Acquisitions	566	-
Disposals/write-offs	(12)	(3)
Depreciation adjustment for write-offs	7	2
Depreciation and amortisation	(121)	(19)
Carrying amount at the end of the period	544	104
Work in progress	-	533
Total plant and equipment	544	637
IT infrastructure		
Carrying amount at beginning of the period	307	331
Acquisitions	106	126
Disposals/write-offs	(207)	(22)
Depreciation adjustment for write-offs	198	22
Depreciation and amortisation	(131)	(150)
Carrying amount at the end of the period	273	307
Work in progress	34	47
Total IT infrastructure	307	354
Total plant and equipment	851	991

Notes to the financial statements

For the year ended 30 June 2019

18 Intangible assets

	2019 \$'000	2018 \$'000
Computer software, at cost (deemed fair value)	4,056	3,070
Accumulated amortisation	(2,754)	(2,721)
Total computer software	1,302	349
Work in progress	-	691
Total intangible assets	1,302	1,040

Reconciliation of computer software

Carrying amount at beginning of the period	349	328
Acquisitions	1,115	182
Disposals/write-offs	(129)	(65)
Amortisation adjustment for write-offs	129	65
Amortisation	(162)	(161)
Carrying amount at the end of the period	1,302	349
Work in progress	-	691
Total intangible assets	1,302	1,040

All intangible assets are classified as a level 2 asset for the purposes of the fair value hierarchy.

Impairment

There were no indications of impairment on intangible assets at 30 June 2019.

19 Payables

	2019 \$'000	2018 \$'000
Current		
Creditors	119	26
Accrued expenses	794	861
GST input tax payable	-	79
Employment on-costs	171	164
Total current payables	1,084	1,130
Non-current		
Employment on-costs	104	81
Total non-current payables	104	81
Total payables	1,188	1,211

Notes to the financial statements

For the year ended 30 June 2019

20 Employee benefits liability

	2019 \$'000	2018 \$'000
Current		
Accrued salaries and wages	313	341
Annual leave	831	855
Long service leave	22	19
Total current employee benefits	1,166	1,215
Non-current		
Long service leave	999	765
Total non-current employee benefits	999	765
Total employee benefits	2,165	1,980

Australian Accounting Standard - AASB 119 - Employee Benefits, contains the calculation methodology for long service leave liability. The actuarial assessment is performed by the SA Department of Treasury who provide the basis for the measurement of long service leave.

21 Other liabilities

	2019 \$'000	2018 \$'000
Current		
Unearned revenue	3,033	2,110
Deferred lease incentive	223	264
Total other liabilities	3,256	2,374

22 Provisions

	2019 \$'000	2018 \$'000
Non-current		
Provision for make good	339	338
Total non-current provisions	339	338
Reconciliation of provision for make good		
Carrying amount at the beginning of the period	338	329
Provision to make good leasehold premises	1	9
Carrying amount at end of period	339	338

Notes to the financial statements

For the year ended 30 June 2019

23 Equity

	2019 \$'000	2018 \$'000
Contributed capital		
New South Wales	750	750
Victoria	556	556
Queensland	432	432
South Australia	173	173
Tasmania	54	54
Australian Capital Territory	36	36
Western Australia	14	14
Northern Territory	2	2
Total contributed capital	2,017	2,017
Retained earnings	11,451	8,325
Total equity	13,468	10,342

The Funding Agreement with the Jurisdictions provides for the maintenance of a capital reserve to meet any adverse funding situation or unexpected cash flows. Each state and territory provided their portion of the funds for the capital reserve which is intended to be retained by the Commission for its lifetime.

24 Unrecognised contractual commitments

24.1 Capital commitments

	2019 \$'000	2018 \$'000
Capital expenditure contracted for at the reporting date but are not recognised as liabilities in the financial report, are payable as follows:		
Within one year	64	29
Total capital commitments	64	29

24.2 Expenditure commitments - other

	2019 \$'000	2018 \$'000
Within one year	2,080	1,225
Later than one year but not longer than five years	229	131
Total commitments - other	2,309	1,356

The Commission's other commitments are for agreements for provision of services.

Notes to the financial statements

For the year ended 30 June 2019

24.3 Operating lease commitments

	2019 \$'000	2018 \$'000
Commitments for minimum lease payments in relation to non-cancellable operating leases, contracted for at the reporting date but not recognised as liabilities are payable as follows:		
Within one year	1,239	1,188
More than one year but not later than five years	322	2,420
Later than five years	-	-
Total operating lease commitments	1,561	3,608
Representing		
Non-cancellable operating leases	1,561	3,608
Total operating lease commitments	1,561	3,608

The Commission's operating leases are for office accommodation. Office accommodation is leased from Perron Investments Pty Ltd and Perpetual Trustee Company Limited ("Landlords"). A lease commenced 1 June 2013 and is non-cancellable with a term of eight years (expiring on 31 May 2021) with an option to renew for a further five years. Rent is payable monthly in advance. The lease rental increments are fixed at 4.0% per annum for the lease term.

A Deed of Variation of Lease ("Variation Deed") was executed in July 2019, between the Landlords and the Commission to allow for an early termination (due to the Landlords' intention of converting the office building into residential apartments). The deed provides the Commission with various alternative dates for early termination. If the Commission does not advise the Landlords of an early termination date, the lease will terminate on 30 September 2020 in accordance with the Variation Deed. The above operating lease commitments have been calculated up to this date as it is the date on which the existing lease will terminate.

25 Contingent assets and liabilities

The Commission is not aware of any contingent assets and liabilities other than as described below.

- On 16 April 2019, the Commission approved a delegation of authority to the Chief Executive to execute a Variation Deed for the Commission's current lease and a heads of agreement setting out key commercial terms for leasing the Commission's proposed new premises.
- Subsequently, the Variation Deed was signed giving rise to an early termination incentive payment (ie a contingent asset) of between \$570,000 plus GST to \$1,020,000 plus GST, depending on when an early termination notice is given (so long as it is given prior to 30 June 2020).
- If no early termination notice is provided, the lease will terminate on 30 September 2020, with an incentive payment of \$570,000 plus GST.
- The Commission is currently in negotiations for a new accommodation and the move appears to be imminent, therefore some form of economic benefits appear virtually certain to flow to the Commission.

26 Financial risk management/Financial instruments

26.1 Financial risk management

Risk management is managed by the Commission's corporate services and legal sections and risk management policies are in accordance with ISO 31000 - International Standard for Risk Management – Principles and guidelines.

26.2 Liquidity risk

The Commission is funded principally from contributions by the Jurisdictions. On an annual basis, the Commission submits its annual budget together with a 3 year forward estimate to the COAG Energy Council for approval.

Notes to the financial statements

For the year ended 30 June 2019

26.3 Categorisation of financial instruments

Details of significant accounting policies and methods adopted including the criteria for recognition, the basis of measurement, and the basis on which income and expenses are recognised with respect to each class of financial asset, financial liability are disclosed in Note 3 Summary of significant accounting policies.

Classification applicable until 30 June 2018 under AASB 139 *Financial Instruments: Recognition and Measurement*

The carrying amounts are detailed below of each of the following categories of financial assets and liabilities:

- Loan and receivables
- Financial liabilities measured at cost.

Classification applicable from 1 July 2018 under AASB 9 *Financial Instruments*

On initial recognition, a financial asset is classified as measured at amortised cost, fair value through other comprehensive income (FVOCI) – debt instrument, FVOCI – equity instrument or fair value through profit or loss.

A financial asset is measured at amortised cost if it meets both of the following conditions:

- it is held within a business model whose objective is to hold assets to collect contractual cash flows, and
- its contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest only on the principal amount outstanding.

The Commission measures all financial instruments at amortised cost.

Categorisation analysis of financial assets and liabilities

Category of financial asset and financial liability	Note	2019	2018	
		Carrying amount/ fair value (\$'000)	Carrying amount/ fair value \$'000	
Financial assets				
Financial assets at amortised cost				
Cash and cash equivalents	15	17,127	13,623	
Receivables (1), (2)	16	117	223	
Total financial assets		17,244	13,846	
Financial liabilities				
Financial liabilities at amortised cost				
Payables (1)	19	626	656	
Total financial liabilities		626	656	

(1) Receivable and payable amounts disclosed here exclude amounts relating to statutory receivables and payables. In government, certain rights to receive or pay cash may not be contractual and therefore in these situations, the requirements will not apply. Where rights or obligations have their source in legislation such as levy receivables/payables, tax equivalents, Commonwealth tax etc. they would be excluded from the disclosure. The standard defines 'contract' as enforceable by law. All amounts recorded are carried at cost.

(2) Receivables amount disclosed here excludes prepayments. Prepayments are presented in Note 16 as trade and other receivables in accordance with paragraph 78(b) of AASB 101 – *Presentation of financial statements*. However, prepayments are not financial assets as defined in AASB 132 – *Financial instruments presentation*, as the future economic benefit of these assets is the

Notes to the financial statements

For the year ended 30 June 2019

receipt of goods and services rather than the right to receive cash or another financial asset.

27 Events after reporting period

There are no events occurring after 30 June that have a material financial implication on the financial statements.

28 Disclosure of administered items

Since March 2018, the Commission continues to administer resources on behalf of the ESB. Refer to Note 1.1 for further details.

Transactions and balances relating to these administered resources are not recognised as the Commission's income, expenses, cash inflows or cash outflows, assets or liabilities. They are recognised under Note 28 as administered income, expenses, cash inflows, cash outflows, assets or liabilities.

	2019 \$'000	2018 \$'000
Administered income		
Contributions from the Commonwealth	4,608	4,156
Interest revenue	34	3
Total administered income	4,642	4,159
Administered expenses		
Secondment fees	1,199	230
Supplies and services	2,529	432
Total administered expenses	3,728	662
Net result	914	3,497
Administered current assets		
Cash	4,441	3,669
Property, plant and equipment	3	-
Total administered assets	4,444	3,669
Administered current liabilities		
Accrued expenses - due to the AEMC	33	172
Total administered liabilities	33	172
Net administered assets	4,411	3,497
Administered equity		
Retained earnings	914	3,497
Total administered equity	914	3,497
Changes in equity		
Balance at 1 July	3,497	-
Net result	914	3,497
Balance at 30 June	4,411	3,497

Notes to the financial statements

For the year ended 30 June 2019

28 Disclosure of administered items (continued)

	2019 \$'000	2018 \$'000
Cash flows from operating activities		
Cash inflows		
Contributions from the Commonwealth	4,608	4,156
Interest received	34	3
Total administered income	4,642	4,159
Cash outflows		
Secondment fees	(1,101)	(132)
Payments for supplies and services	(2,769)	(358)
Total administered expenses	(3,870)	(490)
Net cash inflows/(outflows) from operating activities	772	3,669
Net increase/decrease in cash	772	3,669
Cash at 1 July	3,669	-
Cash at 30 June	4,441	3,669



STATUTORY REPORTS

DECLAN KELLY, SENIOR ADVISER, AEMC

STATUTORY REPORTS

MCE statements of policy principles

There are currently no statements of policy principles made by the Ministerial Council on Energy².

External consultants

The AEMC supplements its own resources with consultants. In 2018-2019 the total amount expended was \$2.09m.

External consultants – spending bands

Number and dollar amount of consultancies that fell within the following	No.	2018-2019 \$000
Below \$10,000	3	3
Above \$10,000	19	2084
Total	22	2087

External consultants – project descriptions

Company	Project description
Alviss Consulting	Providing Victorian retail tariff data for the 2019 <i>retail energy competition review</i>
The Brattle Group	Advice on high-impact, low-probability events and the framework for reliability in the national electricity market
Cambridge Economic Policy Associates	Advice for the <i>Coordination of generation and transmission investment implementation – access and charging review</i>
Colmar Brunton	Quantitative small business consumer research for the 2019 <i>retail energy competition review</i>
Creative Energy Consulting	Advice on access reform for the <i>Coordination of generation and transmission investment implementation – access and charging review</i> ; advice on frequency control ancillary services; advice on transmission use of service (TUOS) pricing; advice on distribution business led service delivery models for stand-alone power systems
DGA Consulting	International comparison review and advice on system security risks
DiGILENT Pacific	Advice with respect to generator access standards
EY	Modelling and advice on residential electricity price trends
Frontier Economics	Electricity market scenario modelling
GHD	Advice on AEMO's request for a protected event declaration; recommendations for changes to the generator compliance template
Greenview Strategic Consulting	Review of arrangements for participation of distributed energy resources in system security frameworks
HWL Ebsworth Lawyers	Property law advice

² The Ministerial Council on Energy (MCE) is referenced in the AEMC's governing legislation and is a legally enduring body comprising the Federal, State and Territory ministers responsible for energy. On 1 July 2011 the MCE was amalgamated with the Ministerial Council on Mineral and Petroleum Resources. The amalgamated body is now called the COAG Energy Council.

Company	Project description
Houston Kemp Economists	Overview of the advice that HoustonKemp provided the COAG Energy Council on stand-alone power systems
Johnson Winter & Slattery Lawyers	Provision of legal support on projects
KPMG	Advice on distribution business-led service delivery models for stand-alone power systems; advice on capital expenditure ex-post risk sharing arrangements; advice on regulatory arrangements for existing embedded networks
List G – Tom Clarke	Provision of legal support on projects
Minter Ellison	Provision of legal support on projects
NERA Economic Consulting	Advice on market making schemes
Newgate Research	Qualitative and quantitative stakeholder research
PricewaterhouseCoopers	Advice on taxation obligations
Saratoga Associates	Advice on the design of capacity allocation and congestion charging mechanisms in the Victorian declared wholesale gas market
Seyfarth Shaw	Employment law advice
The University of Melbourne	Provision of advice in relation to system resilience

AEMO's use of powers of direction

A report of the AEMC under section 27 of the Australian Energy Market Commission Establishment Act 2004 (SA) must include a report on AEMO's use of powers of direction. AEMO can direct registered participants to undertake actions that are in AEMO's view necessary to help deliver power system security. A registered participant who is subject to a direction from AEMO may be entitled to compensation for complying with the direction. AEMO can also issue instructions to any registered participants. Participants complying with an instruction are not able to obtain compensation. The directions below were issued by AEMO between 1 July 2018 and 30 June 2019 in relation to power system security under clause 4.8.9(a) of the National Electricity Rules (NER).

1

Between 02 July 2018 and 08 July 2018, AEMO issued 14 directions to participants in SA to maintain power system security under clause 4.8.9 of the NER.

The 1st direction was issued between 2120 hrs on 02 July 2018 and 0800 hrs on 03 July 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 2nd direction was issued between 1700 hrs on 03 July 2018 and 0800 hrs on 04 July 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 3rd direction was issued between 1700 hrs on 03 July 2018 and 0800 hrs on 04 July 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 4th direction was issued between 1415 hrs on 04 July 2018 and 0855 hrs on 05 July 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 5th direction was issued between 1505 hrs on 05 July 2018 and 1730 hrs on 07 July 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 6th direction was issued between 1727 hrs on 07 July 2018 and 1630 hrs on 08 July 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 7th direction was issued between 1450 hrs on 04 July 2018 and 2000 hrs on 04 July 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 8th direction was issued between 1515 hrs on 04 July 2018 and 0700 hrs on 07 July 2018. The directed participant received compensation for the provision of energy pursuant to the

direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 9th direction was issued between 1315 hrs on 07 July 2018 and 1830 hrs on 07 July 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 10th direction was issued between 1530 hrs on 04 July 2018 and 0855 hrs on 05 July 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 11th direction was issued between 0940 hrs on 05 July 2018 and 1200 hrs on 06 July 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 12th direction was issued between 1515 hrs on 06 July 2018 and 1730 hrs on 07 July 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 13th direction was issued between 1725 hrs on 07 July 2018 and 1600 hrs on 08 July 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 14th direction was issued between 1018 hrs on 07 July 2018 and 1300 hrs on 08 July 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

2

Between 14 July 2018 and 19 July 2018, AEMO issued 5 directions to participants in SA to maintain power system security under clause 4.8.9 of the NER.

The 1st direction was issued between 1630 hrs on 14 July 2018 and 1430 hrs on 15 July 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 2nd direction was issued between 1630 hrs on 15 July 2018 and 0600 hrs on 16 July 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 3rd direction was issued between 1630 hrs on 16 July 2018 and 0630 hrs on 17 July 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 4th direction was issued between 1630 hrs on 17 July 2018 and 1500 hrs on 18 July 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 5th direction was issued between 1630 hrs on 18 July 2018 and 0700 hrs on 19 July 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

3

Between 21 July 2018 and 02 August 2018, AEMO issued 9 directions to participants in SA to maintain power system security under clause 4.8.9 of the NER.

The 1st direction was issued between 1630 hrs on 21 July 2018 and 1530 hrs on 22 July 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 2nd direction was issued between 2030 hrs on 21 July 2018 and 1530 hrs on 22 July 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 3rd direction was issued between 2000 hrs on 23 July 2018 and 0600 hrs on 24 July 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made

no claims for additional compensation under NER clause 3.15.7B.

The 4th direction was issued between 1930 hrs on 28 July 2018 and 1600 hrs on 29 July 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 5th direction was issued between 1930 hrs on 28 July 2018 and 1530 hrs on 29 July 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 6th direction was issued between 1130 hrs on 30 July 2018 and 1630 hrs on 30 July 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 7th direction was issued between 1830 hrs on 30 July 2018 and 0730 hrs on 31 July 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 8th direction was issued between 1800 hrs on 01 August 2018 and 0530 hrs on 02 August 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

AEMO's use of powers of direction

The 9th direction was issued between 1800 hrs on 01 August 2018 and 2000 hrs on 02 August 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

4

Between 02 August 2018 and 06 August 2018, AEMO issued 9 directions to participants in SA to maintain power system security under clause 4.8.9 of the NER.

The 1st direction was issued between 2300 hrs on 02 August 2018 and 1300 hrs on 05 August 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 2nd direction was issued between 2300 hrs on 02 August 2018 and 1400 hrs on 03 August 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 3rd direction was issued between 1330 hrs on 03 August 2018 and 1600 hrs on 04 August 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 4th direction was issued between 1600 hrs on 03 August 2018 and 1700 hrs on 04 August 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 5th direction was issued between 1350 hrs on 04 August 2018 and 1530 hrs on 05 August 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 6th direction was issued between 1700 hrs on 04 August 2018 and 1430 hrs on 05 August 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 7th direction was issued between 1900 hrs on 04 August 2018 and 0730 hrs on 06 August 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 8th direction was issued between 1930 hrs on 05 August 2018 and 0500 hrs on 06 August 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 9th direction was issued between 1930 hrs on 05 August 2018 and 0730 hrs on 06 August 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

5

Between 06 August 2018 and 12 August 2018, AEMO issued 8 directions to participants in SA to maintain power system security under clause 4.8.9 of the NER.

The 1st direction was issued between 1630 hrs on 06 August 2018 and 0600 hrs on 07 August 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 2nd direction was issued between 1430 hrs on 07 August 2018 and 0730 hrs on 08 August 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 3rd direction was issued between 1430 hrs on 07 August 2018 and 0730 hrs on 08 August 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 4th direction was issued between 1530 hrs on 08 August 2018 and 1700 hrs on 09 August 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 5th direction was issued between 1630 hrs on 08 August 2018 and 1600 hrs on 09 August 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 6th direction was issued between 2130 hrs on 09 August 2018 and 1400 hrs on 10 August 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 7th direction was issued between 1700 hrs on 10 August 2018 and 1700 hrs on 11 August 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 8th direction was issued between 1900 hrs on 11 August 2018 and 1530 hrs on 12 August 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

6

Between 14 August 2018 and 18 August 2018, AEMO issued 6 directions to participants in SA to maintain power system security under clause 4.8.9 of the NER.

The 1st direction was issued between 1530 hrs on 14 August 2018 and 0830 hrs on 15 August 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 2nd direction was issued between 1530 hrs on 14 August 2018 and 0600 hrs on 15 August 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause

3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 3rd direction was issued between 1630 hrs on 17 August 2018 and 1300 hrs on 19 August 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 4th direction was issued between 1630 hrs on 17 August 2018 and 1300 hrs on 19 August 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 5th direction was issued between 1630 hrs on 17 August 2018 and 1500 hrs on 19 August 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 6th direction was issued between 1630 hrs on 17 August 2018 and 1500 hrs on 18 August 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

7

Between 29 August 2018 and 08 September 2018, AEMO issued 5 directions to participants in SA to maintain power system security under clause 4.8.9 of the NER.

The 1st direction was issued between 1500 hrs on 29 August 2018 and 0600 hrs on 30 August 2018. The directed participant received compensation for the provision of energy pursuant to the

direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 2nd direction was issued between 1630 hrs on 29 August 2018 and 1000 hrs on 30 August 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 3rd direction was issued between 1800 hrs on 30 August 2018 and 0400 hrs on 31 August 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 4th direction was issued between 0800 hrs on 06 September 2018 and 1500 hrs on 06 September 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 5th direction was issued between 0000 hrs on 08 September 2018 and 1630 hrs on 08 September 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

AEMO's use of powers of direction

8

Between 08 September 2018 and 15 September 2018, AEMO issued 10 directions to participants in SA to maintain power system security under clause 4.8.9 of the NER.

The 1st direction was issued between 1700 hrs on 08 September 2018 and 1600 hrs on 09 September 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 2nd direction was issued between 1700 hrs on 08 September 2018 and 1600 hrs on 09 September 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 3rd direction was issued between 1730 hrs on 08 September 2018 and 1700 hrs on 09 September 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 4th direction was issued between 1400 hrs on 10 September 2018 and 1200 hrs on 12 September 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 5th direction was issued between 1400 hrs on 10 September 2018 and 1740 hrs on 11 September 2018. The directed participant received

compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 6th direction was issued between 1400 hrs on 10 September 2018 and 0800 hrs on 12 September 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 7th direction was issued between 1400 hrs on 10 September 2018 and 1800 hrs on 11 September 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 8th direction was issued between 1400 hrs on 13 September 2018 and 2235 hrs on 15 September 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 9th direction was issued between 1400 hrs on 13 September 2018 and 1730 hrs on 15 September 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 10th direction was issued between 1600 hrs on 13 September 2018 and 2200 hrs on 15 September 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

9

Between 16 September 2018 and 19 September 2018, AEMO issued 9 directions to participants in SA to maintain power system security under clause 4.8.9 of the NER.

The 1st direction was issued between 1900 hrs on 16 September 2018 and 1945 hrs on 16 September 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 2nd direction was issued between 1945 hrs on 16 September 2018 and 1700 hrs on 17 September 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 3rd direction was issued between 0930 hrs on 17 September 2018 and 1630 hrs on 17 September 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 4th direction was issued between 1145 hrs on 17 September 2018 and 1430 hrs on 19 September 2018.

The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 5th direction was issued between 1415 hrs on 17 September 2018 and 0500 hrs on 19 September 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 6th direction was issued between 1440 hrs on 17 September 2018 and 1155 hrs on 18 September 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 7th direction was issued between 0950 hrs on 18 September 2018 and 1515 hrs on 18 September 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 8th direction was issued between 0950 hrs on 18 September 2018 and 1515 hrs on 18 September 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 9th direction was issued between 0950 hrs on 19 September 2018 and 1600 hrs on 19 September 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

10

Between 22 September 2018 and 22 September 2018, AEMO issued 2 directions to participants in SA to maintain power system security under clause 4.8.9 of the NER.

The 1st direction was issued between 1530 hrs on 22 September 2018 and 1835 hrs on 22 September 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 2nd direction was issued between 1530 hrs on 22 September 2018 and 1835 hrs on 22 September 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

11

Between 23 September 2018 and 24 September 2018, AEMO issued 1 direction to participants in SA to maintain power system security under clause 4.8.9 of the NER.

The direction was issued between 1100 hrs on 23 September 2018 and 0400 hrs on 24 September 2018. The directed participant received compensation for the provision of energy pursuant to the

direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

12

Between 12 October 2018 and 15 October 2018, AEMO issued 2 directions to participants in SA to maintain power system security under clause 4.8.9 of the NER.

The 1st direction was issued between 1315 hrs on 12 October 2018 and 1300 hrs on 15 October 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 2nd direction was issued between 1715 hrs on 13 October 2018 and 1300 hrs on 15 October 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

13

Between 16 November 2018 and 17 November 2018, AEMO issued 1 direction to participants in VIC to maintain power system security under clause 4.8.9 of the NER.

The direction was issued between 2200 hrs on 16 November 2018 and 1700 hrs on 17 November 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

AEMO's use of powers of direction

14

Between 18 November 2018 and 18 November 2018, AEMO issued 1 direction to participants in VIC to maintain power system security under clause 4.8.9 of the NER.

The direction was issued between 0230 hrs on 18 November 2018 and 0800 hrs on 18 November 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

15

Between 21 November 2018 and 25 November 2018, AEMO issued 5 directions to participants in SA to maintain power system security under clause 4.8.9 of the NER.

The 1st direction was issued between 1800 hrs on 21 November 2018 and 0510 hrs on 22 November 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 2nd direction was issued between 1100 hrs on 22 November 2018 and 1730 hrs on 22 November 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 3rd direction was issued between 1500 hrs on 23 November 2018 and 1545 hrs on 23 November 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in

accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 4th direction was issued between 1500 hrs on 23 November 2018 and 1545 hrs on 23 November 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 5th direction was issued between 1500 hrs on 23 November 2018 and 1500 hrs on 25 November 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

16

Between 24 November 2018 and 26 November 2018, AEMO issued 1 direction to participants in VIC to maintain power system security under clause 4.8.9 of the NER.

The 1st direction was issued between 2030 hrs on 24 November 2018 and 0600 hrs on 26 November 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made a claim for additional compensation under NER clause 3.15.7B.

17

Between 26 November 2018 and 27 November 2018, AEMO issued 1 direction to participants in VIC to maintain power system security under clause 4.8.9 of the NER.

The direction was issued between 1800 hrs on 26 November 2018 and 0510 hrs on 27 November 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made a claim for additional compensation under NER clause 3.15.7B.

18

Between 30 November 2018 and 02 December 2018, AEMO issued 5 directions to participants in SA to maintain power system security under clause 4.8.9 of the NER.

The 1st direction was issued between 1700 hrs on 30 November 2018 and 1500 hrs on 03 December 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 2nd direction was issued between 2030 hrs on 01 December 2018 and 0505 hrs on 02 December 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 3rd direction was issued between 2030 hrs on 01 December 2018 and 1830 hrs on 02 December 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in

accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 4th direction was issued between 2030 hrs on 01 December 2018 and 1630 hrs on 02 December 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 5th direction was issued between 0505 hrs on 02 December 2018 and 1830 hrs on 02 December 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

19

Between 13 December 2018 and 14 December 2018, AEMO issued 4 directions to participants in SA to maintain power system security under clause 4.8.9 of the NER.

The 1st direction was issued between 0700 hrs on 13 December 2018 and 1400 hrs on 14 December 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 2nd direction was issued between 0700 hrs on 13 December 2018 and 1400 hrs on 14 December 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 3rd direction was issued between 1830 hrs on 13 December 2018 and 1255 hrs on 14 December 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 4th direction was issued between 1223 hrs on 14 December 2018 and 1455 hrs on 14 December 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

20

Between 20 December 2018 and 23 December 2018, AEMO issued 4 directions to participants in SA to maintain power system security under clause 4.8.9 of the NER.

The 1st direction was issued between 1640 hrs on 20 December 2018 and 1830 hrs on 21 December 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 2nd direction was issued between 1640 hrs on 20 December 2018 and 1830 hrs on 21 December 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 3rd direction was issued between 1640 hrs on 20 December 2018 and 1830 hrs on 21 December 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 4th direction was issued between 1920 hrs on 21 December 2018 and 1600 hrs on 23 December 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

21

Between 23 December 2018 and 30 December 2018, AEMO issued 5 directions to participants in SA to maintain power system security under clause 4.8.9 of the NER.

The 1st direction was issued between 1800 hrs on 23 December 2018 and 0600 hrs on 24 December 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 2nd direction was issued between 1630 hrs on 24 December 2018 and 1100 hrs on 25 December 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

AEMO's use of powers of direction

The 3rd direction was issued between 1800 hrs on 25 December 2018 and 1130 hrs on 26 December 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 4th direction was issued between 1600 hrs on 28 December 2018 and 1000 hrs on 29 December 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 5th direction was issued between 1600 hrs on 29 December 2018 and 1530 hrs on 30 December 2018. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

22

Between 24 January 2019 and 24 January 2019, AEMO issued 1 direction to participants in NSW to maintain power system security under clause 4.8.9 of the NER.

The direction was issued between 1639 hrs on 24 January 2019 and 2115 hrs on 24 January 2019. The directed participant received compensation for the provision of services other than energy and market ancillary services pursuant to the direction, in accordance with NER clause 3.15.7B.

23

Between 08 February 2019 and 13 February 2019, AEMO issued 4 directions to participants in SA to maintain power system security under clause 4.8.9 of the NER.

The 1st direction was issued between 1600 hrs on 08 February 2019 and 1730 hrs on 09 February 2019. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 2nd direction was issued between 0130 hrs on 09 February 2019 and 1530 hrs on 09 February 2019. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 3rd direction was issued between 2230 hrs on 11 February 2019 and 0630 hrs on 12 February 2019. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 4th direction was issued between 1400 hrs on 12 February 2019 and 0445 hrs on 13 February 2019. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

24

Between 17 February 2019 and 24 February 2019, AEMO issued 3 directions to participants in SA to maintain power system security under clause 4.8.9 of the NER.

The 1st direction was issued between 0910 hrs on 17 February 2019 and 1320 hrs on 17 February 2019. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 2nd direction was issued between 1900 hrs on 23 February 2019 and 1045 hrs on 24 February 2019. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 3rd direction was issued between 1900 hrs on 23 February 2019 and 1045 hrs on 24 February 2019. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

25

Between 05 March 2019 and 10 March 2019, AEMO issued 8 directions to participants in SA to maintain power system security under clause 4.8.9 of the NER.

The 1st direction was issued between 1400 hrs on 05 March 2019 and 2330 hrs on 05 March 2019. The directed participant received compensation for the provision of energy pursuant to the

direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 2nd direction was issued between 1400 hrs on 05 March 2019 and 2330 hrs on 05 March 2019. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 3rd direction was issued between 2344 hrs on 05 March 2019 and 0930 hrs on 06 March 2019. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 4th direction was issued between 0150 hrs on 06 March 2019 and 1600 hrs on 06 March 2019. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 5th direction was issued between 0151 hrs on 06 March 2019 and 1600 hrs on 06 March 2019. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 6th direction was issued between 1500 hrs on 09 March 2019 and 1520 hrs on 09 March 2019. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 7th direction was issued between 1500 hrs on 09 March 2019 and 1500 hrs on 10 March 2019. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 8th direction was issued between 1520 hrs on 09 March 2019 and 1500 hrs on 10 March 2019. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

26

Between 24 March 2019 and 31 March 2019, AEMO issued 6 directions to participants in SA to maintain power system security under clause 4.8.9 of the NER.

The 1st direction was issued between 1500 hrs on 24 March 2019 and 1400 hrs on 25 March 2019. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 2nd direction was issued between 1330 hrs on 29 March 2019 and 0115 hrs on 30 March 2019. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 3rd direction was issued between 2000 hrs on 29 March 2019 and 1630 hrs on 30 March 2019. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause

3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 4th direction was issued between 0105 hrs on 30 March 2019 and 0330 hrs on 30 March 2019. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 5th direction was issued between 0135 hrs on 30 March 2019 and 1200 hrs on 31 March 2019. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 6th direction was issued between 2000 hrs on 30 March 2019 and 1400 hrs on 31 March 2019. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

27

Between 16 April 2019 and 26 April 2019, AEMO issued 11 directions to participants in SA to maintain power system security under clause 4.8.9 of the NER.

The 1st direction was issued between 1800 hrs on 16 April 2019 and 1630 hrs on 17 April 2019. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

AEMO's use of powers of direction

The 2nd direction was issued between 1500 hrs on 18 April 2019 and 1630 hrs on 19 April 2019. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 3rd direction was issued between 1500 hrs on 18 April 2019 and 1910 hrs on 18 April 2019. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 4th direction was issued between 1500 hrs on 18 April 2019 and 1910 hrs on 18 April 2019. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 5th direction was issued between 1500 hrs on 18 April 2019 and 1500 hrs on 19 April 2019. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 6th direction was issued between 1800 hrs on 18 April 2019 and 1600 hrs on 20 April 2019. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 7th direction was issued between 1530 hrs on 19 April 2019 and 1500 hrs on 22 April 2019. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause

3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 8th direction was issued between 1530 hrs on 20 April 2019 and 1630 hrs on 21 April 2019. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 9th direction was issued between 1630 hrs on 21 April 2019 and 1600 hrs on 22 April 2019. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 10th direction was issued between 2000 hrs on 19 April 2019 and 1630 hrs on 20 April 2019. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 11th direction was issued between 0000 hrs on 25 April 2019 and 1230 hrs on 26 April 2019. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

28

Between 29 April 2019 and 02 May 2019, AEMO issued 3 directions to participants in SA to maintain power system security under clause 4.8.9 of the NER.

The 1st direction was issued between 1500 hrs on 29 April 2019 and 1700 hrs on 30 April 2019. The directed participant received compensation for the provision of energy pursuant to the

direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 2nd direction was issued between 2130 hrs on 30 April 2019 and 1600 hrs on 01 May 2019. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 3rd direction was issued between 2000 hrs on 01 May 2019 and 1600 hrs on 02 May 2019. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

29

Between 18 May 2019 and 19 May 2019, AEMO issued 2 directions to participants in SA to maintain power system security under clause 4.8.9 of the NER.

The 1st direction was issued between 1600 hrs on 18 May 2019 and 1400 hrs on 19 May 2019. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 2nd direction was issued between 2100 hrs on 18 May 2019 and 1400 hrs on 19 May 2019. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

30

Between 26 May 2019 and 27 May 2019, AEMO issued 1 direction to participants in SA to maintain power system security under clause 4.8.9 of the NER.

The direction was issued between 1430 hrs on 26 May 2019 and 1600 hrs on 27 May 2019. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

31

Between 08 June 2019 and 10 June 2019, AEMO issued 6 directions to participants in SA to maintain power system security under clause 4.8.9 of the NER.

The 1st direction was issued between 2000 hrs on 08 June 2019 and 1430 hrs on 09 June 2019. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 2nd direction was issued between 2000 hrs on 08 June 2019 and 1430 hrs on 09 June 2019. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 3rd direction was issued between 1430 hrs on 09 June 2019 and 0208 hrs on 10 June 2019. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 4th direction was issued between 1430 hrs on 06 June 2019 and 0500 hrs on 10 June 2019. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 5th direction was issued between 0225 hrs on 10 June 2019 and 0500 hrs on 10 June 2019. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 6th direction was issued between 0230 hrs on 10 June 2019 and 1430 hrs on 10 June 2019. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

32

Between 26 June 2019 and 30 June 2019, AEMO issued 6 directions to participants in SA to maintain power system security under clause 4.8.9 of the NER.

The 1st direction was issued between 2200 hrs on 26 June 2019 and 0700 hrs on 27 June 2019. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 2nd direction was issued between 2200 hrs on 26 June 2019 and 0700 hrs on 27 June 2019. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 3rd direction was issued between 1400 hrs on 27 June 2019 and 1515 hrs on 28 June 2019. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 4th direction was issued between 1400 hrs on 27 June 2019 and 1515 hrs on 28 June 2019. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 5th direction was issued between 1630 hrs on 28 June 2019 and 1400 hrs on 29 June 2019. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

The 6th direction was issued between 1800 hrs on 29 June 2019 and 1430 hrs on 30 June 2019. The directed participant received compensation for the provision of energy pursuant to the direction, in accordance with NER clause 3.15.7(c). The directed participant made no claims for additional compensation under NER clause 3.15.7B.

Use by registered participants of inspection and testing rights

From 1 July 2018 to 30 June 2019 AEMO was not informed of any inspections conducted under clause 5.7.1, or any tests conducted under clause 5.7.2 of the National Electricity Rules. These provisions relate to the right of registered participants to enter the facilities and test the equipment of other participants to assess compliance with technical requirements.

Compliance

Compliance

This report details our performance from 1 July 2018 to 30 June 2019 in accordance with the Australian Energy Market Commission Establishment Act (SA) and the Australian Energy Market Commission Establishment Regulations Act 2005 (SA).

This index indicates where each of the items which the AEMC must report on is located within the report.

1. A report of the AEMC under section 27 of the Act must include a report on the following in respect of the financial year concerned:

- a. the National Energy Law provisions and other legislative provisions that confer functions on the AEMC p5
- b. the AEMC's relationship to other bodies involved in the administration of National Energy Laws p4
- c. the membership and organisation of the AEMC p37–43
- d. the AEMC's strategic plans and the relationship of the plans to objectives set out in the National Energy Laws p14–25
- e. the AEMC's activities and their efficiency and effectiveness p61–96
- f. the AEMC's financial affairs p97–128
- g. disclosures made by Commissioners under section 22 of the Act p57
- h. positions in the employment of the AEMC, including salary levels for the positions, any positions created or filled and any positions abolished or vacated p115, 42–43
- i. the extent to which external consultants have been engaged by the AEMC, the nature of the work undertaken by the consultants and the total cost to the AEMC of the consultancies p130–131
- j. the occupational health, safety and rehabilitation programs of the AEMC and their effectiveness p53
- k. any instances of fraud in the operations of the AEMC and the strategies implemented to prevent and control fraud p59
- I. in relation to electricity:
 - I. the extent to which the operation of the Rules has met the national electricity market objective and the strategic development of the Rules to meet the national electricity market objective p62–78
 - II. any statements of policy principles that have been issued by the MCE in relation to the AEMC and any directions that have been given by the MCE to the AEMC p130
 - III. the rule making activities of the AEMC under the National Electricity Law, including:
 - A. requests for Rules in each of the categories of jurisdictional derogations, participant derogations, non-controversial Rules and urgent Rules, and p34–35
 - B. the stages at which proposed Rules are in the Rule making procedure, and p62–78
 - C. decisions of the AEMC not to proceed with requests for Rules, and p68
 - D. Rules made, and p62–67
 - E. Rules that have come into operation p62–67
 - IV. MCE directed reviews and AEMC initiated reviews under the National Electricity Law p79–96
 - V. market development functions p14–25
- VI. recommendations made by the AEMC for the MCE to request the making of Rules p79–96
- VII. the composition and activities of the Reliability Panel and of any other panels or committees that have been established by the AEMC p45–49
- VIII. AEMO's use of powers of direction in relation to power system security under clause 4.8.9(a) of the Rules p132–143
- IX. The use by registered participants of inspection and testing rights under clauses 5.7.1 and 5.7.2 of the Rules p143
- X. The extent and effectiveness of demand side participation in the national electricity market, including measures that could be undertaken to enhance demand side participation in the national electricity market p68, 71, 81, 88

2. The AEMC's report must include its audited financial statements for the financial year and the Auditor-General's report on the financial statements. p97–128

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