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Brad Archer
Chief Executive
Climate Change Authority
CANBERRA ACT 2600

By email: submissions@climatechangeauthority.gov.au

Dear Mr Archer

AEMC submission on the consultation paper regarding advice on meeting Australia's Paris agreement commitments

The Australian Energy Market Commission (AEMC or Commission) welcomes the opportunity to make a submission on the consultation paper regarding advice on meeting Australia's Paris agreement commitments.

Importance of stock and flows in an emissions context

As the consultation paper notes, Australia, through the United Nations Framework Convention on Climate Change (UNFCCC) and Conference of the Parties (COP) process, has agreed: climate change should be limited to 2 degrees Celsius above pre-industrial levels with an aspiration to limit to 1.5 degrees; and Australia's initial target is to reduce emissions by 26-28% relative to 2005 levels by 2030.

The paper also notes that the CCA will provide advice to help position Australia to not only meet its 2030 target, but also to meet targets with enhanced ambition that put Australia on the path to net zero emissions. This is relevant for the energy sector. Participants in electricity and gas markets are not just concerned with Australia's targets in 2030 but the implied rate of decarbonisation over the life of new assets and infrastructure.

Given the recent and impending exit of large thermal generators and the high prices in the spot and contract market, we would expect to be seeing more new investment in firm dispatchable generation come into the power system. One of the reasons we are not seeing this investment has been attributed to investors being unable to calculate their future risks and revenues – specifically in relation to emissions – over the life of the new asset. Investors require an understanding of the stock of emissions that will be permitted under the 2 degree commitment as well as the flow in any particular year.

The NEO and climate change

The national energy objectives (the national electricity, gas and energy retail objectives) include a specific set of variables – price, quality, safety, reliability and security of supply. When assessing a rule change or a review, the Commission must consider how the outcome of a particular decision would impact on these variables, and therefore on energy consumers over the long term. Other variables may be relevant if they have indirect impacts on price, quality, safety, reliability and security of supply. Climate change and the energy sectors role in this 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 a material impact on the electricity and gas sectors.

In its [stakeholder guide on applying the national energy objectives](#), the Commission has outlined how it considers climate change risks when making rules and providing advice that will serve energy consumers over the long term. This guide underpins our work with our stakeholders to clearly identify the direct and indirect impacts of rule requests and reviews before making a decision.

AEMC's strategic priorities

There are five key trends that are changing the way the physical power system operates, the way we regulate it and the way customers experience it:

1. There is a shift from large geographically concentrated to small geographically dispersed generation. This requires us to rethink how we plan and develop markets for efficient investment in new generation and transmission.
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 establish new frameworks for ensuring system security.
3. Customers are increasingly adopting small-scale solar and energy storage technologies. This requires us to think about how to efficiently plan and invest in network infrastructure to 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. Embracing market frameworks that efficiently utilise these technologies to lower costs for consumers is an increasing focus of the Commission.
5. Demand from customers and supply from generators are more variable making forecasting a challenge and adding risk to operational and investment decisions. It is important that we maintain the link between financial incentives facing market participants and the physical needs of the system.

To respond to these key trends and changes, the Commission is working with our stakeholders to take us from where we are today, to where consumers want us to be in the future. These areas are not the only areas of reform needed to deliver the long term interests of customers, but they are the five areas within the AEMC's legal remit that we believe to be the most urgent or important. We will be prioritising rule change requests and other work to deliver the changes in these areas so customers can access safe, secure reliable energy at the lowest possible costs as we transition to a lower emission power sector over time.

I would be happy to provide more information on any matters that may assist the Committee in its deliberations. In the meantime, please do not hesitate to contact me directly on ph. [REDACTED] or [REDACTED]

Yours sincerely



John Pierce AO
Chairman