

Coordinator of Energy
Attn: Director, Wholesale Markets Branch
Energy Policy WA
Locked Bag 11 Cloisters Square WA
PERTH BC WA 6850

29 September 2022

Dear Mr Thomas,

Thank you for the opportunity to comment on your review of the Reserve Capacity Mechanism.

The energy sector in Western Australia exists to provide electricity and gas to consumers. It is central to energy production and delivery that the long-term interests of energy consumers are served. The Expert Consumer Panel (ECP) was established by the Western Australian Government to provide input on policy, rules and other processes across all elements of the energy supply chain. The ECP has a broad membership base with representatives from the social welfare sector, climate movement, former senior energy sector executives and experts, all of whom bring a unique customer perspective to the work of the group.

The ECP is represented on the Market Advisory Committee (MAC) and one of its members is a member of the RCM Review Working Group and is contributing to the detailed technical discussions in those forums.

The ECP is generally supportive of the proposed directions outlined in the consultation paper and in this submission provides high level comments on key consumer issues.

A secure and reliable supply of electricity is critical for Western Australia's economic and social wellbeing and the state has been well served by the RCM which is designed to ensure that there is sufficient generation capacity in the South West Interconnected System (SWIS) to maintain acceptable reliability of supply. The need to retire fossil fuelled generators and replace them with renewables to meet state and National emissions reductions objectives, as well as to ensure the grid can cope with increasingly extreme weather events caused by climate change, means the RCM needs to be reformed to ensure that it can continue to fulfil its purpose.

The record breaking heatwave that triggered the extended electricity outages that impacted communities across the Perth and south west region in Christmas 2021 - leaving thousands of people without essential air conditioning, refrigeration and other appliances - while caused by network rather than generation capacity constraints, nevertheless highlights the urgency of the reform task. Extreme weather, fuel shortages and market volatility have also caused blackouts and forced electricity rationing in other parts of Australia and the world in the last six months -

the most recent being in California where voluntary demand reduction helped avoid rolling blackouts.¹

The core system security and reliability purposes of the scheme remain absolutely front of mind for stakeholders, and the Coordinator for Energy as the Review progresses. Other considerations, particularly investment certainty, are important but should not be conflated with the system security and reliability objectives.

The modelling undertaken for the review identifies clearly new sources of system stress, including availability duration gaps, minimum demand, and demand rate of change. The RCM settings must create the right incentives for new resources to be built that can plug these distinct gaps - rather than creating additional revenue streams for generators who are not able to provide 'firm' capacity when it is required and would simply transfer risk and cost to consumers with no system security or reliability benefit. This means that, for example, while the region north of Perth may have the best wind resources in the state if considered in aggregate over the course of the year, it experiences 'wind droughts' at key periods when demand for electricity is at its highest and other energy resources are also limited.

To achieve this alignment between the objectives of the RCM and the detailed design, it is important to ensure the methodology for certifying and allocating capacity credits to intermittent generators which Energy Policy WA is developing reflects their contribution to system reliability and provides strong incentives to firm up their capacity.

In addition to getting these settings right, it is also important that the RCM supports a diversity of energy resources, including locational diversity - a design feature Robinson Bowmaker Paul identified as a success factor in its review of capacity markets internationally.² This means that it should support utility-scale generation in parts of the state that can provide firm capacity when it is required, and importantly, support for distributed energy resources including demand response.

Experience in other jurisdictions has shown that the eligibility criteria and contracting arrangements for participating in schemes can unfairly disadvantage demand side and other distributed energy resources. Tempus Energy successfully challenged the validity of the United Kingdom capacity market in the European Court on the basis that it discriminated against demand side resources by offering shorter contracts and setting other conditions that favoured generation. The new demand response mechanism in the National Electricity Market in the east coast of Australia has also struggled to attract capacity - with some in the sector pointing to onerous conditions as a barrier. Therefore a key design consideration is ensuring the availability classes are defined in a flexible and appropriate way.

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<https://www.latimes.com/california/story/2022-09-06/here-is-how-long-socals-heat-wave-will-last-and-how-the-forecast-is-slowly-changing>

² <https://www.wa.gov.au/government/document-collections/reserve-capacity-mechanism-review>

In thinking about how the RCM can support a diverse mix of energy resources, the ECP would also urge the Coordinator of Energy to consider how the RCM can support *local* energy outcomes. A feature of system security and reliability events, and climate change more generally, is that they disproportionately affect lower income and disadvantaged communities. Heatwaves in Western Australia are more severe for example in the eastern suburbs of Perth which get hotter, and do not cool down as quickly as the suburbs near the coast which (historically) receive a seabreeze. The quality of the housing stock and public infrastructure in these areas also contributes to the severity of heatwaves and reliance on air conditioners. The RCM design should therefore consider how, for example, AEMO factors local circumstances into the forecasts which underpin the creation and allocation of capacity credits.

The ECP is also concerned about ensuring the costs of the RCM do not blow out which is a risk given the nature of the resources that need to be procured, the short timeframe in which they need to be procured, the uncertainty associated with the technologies and in the current environment, disruptions in international supply chains.

In many capacity markets around the world, capacity credits are auctioned in a transparent and open way to reveal the efficient cost of the resources that are required. Such auctions often draw-out lower cost capacity sources that would not otherwise be offered or would receive the full administered capacity price. Where possible, forecasting and other decisions are also decentralised - transferring the risk and accountability to market participants where appropriate. However the small, isolated nature of the SWIS and the structure of the market, means that the administrative overheads and market power concerns of running auctions and decentralising decision-making is not necessarily practicable. This means that the roles of AEMO and the ERA, as to who will respectively forecast the energy resources that are needed and set the prices, are pivotal. Transparency around how AEMO and the ERA undertake their work, with regular reviews of energy resource needs and technological and market developments, will be critical to managing cost risks.

The ECP would be pleased to discuss the submission further if required, and will continue to engage in the process as it progresses.

Kind regards

Expert Consumer Panel