Meridian Energy Australia Pty Ltd
Level 15, 357 Collins Street
Melbourne VIC 3000

30 September 2019

Council of Australian Governments Energy Council
Energy Security Board

Email: info@esb.org.au

Energy Security Board Post 2025 Market Design

Meridian Energy Australia Pty Ltd and Powershop Australia Pty Ltd (MEA Group or Powershop) thanks the Energy Security Board (ESB) for the opportunity to provide comments on the ESB's Post 2025 Market Design Issues Paper (the Paper).

Background on the MEA Group

MEA Group is a vertically integrated generator and retailer focused entirely on renewable generation. We opened our portfolio of generation assets with the Mt Millar Wind Farm in South Australia, followed by the Mt Mercer Wind Farm in Victoria. In early 2018 we acquired the Hume, Burrinjuck and Keepit hydroelectric power stations, further expanding our modes of generation. We have supplemented our asset portfolio by entering into a number of power purchase agreements with other renewable generators, and through this investment in new generation we have continued to support Australia's transition to renewable energy.

Powershop is an innovative retailer committed to providing low prices for customers and which recognises the benefits to customers in transitioning to a more distributed and renewable-based energy system. Over the last five years, Powershop has introduced a number of significant, innovative and customer-centric initiatives into the Victorian market, including the first mobile app that allows customers to monitor their usage, a peer-to-peer solar trading trial and a successful customer-led demand response program. Powershop has also been active in supporting community energy initiatives, including providing operational and market services for the community-owned Hepburn Wind Farm, supporting the Warburton hydro project, and working alongside our customers to fund a large range of community and social enterprise energy projects through our Your Community Energy program.

General comments

MEA Group recognises the importance of this review and the need for it to be undertaken in a comprehensive, structured and balanced manner, recognising that any changes to the underlying structure of the National Electricity Market (NEM) has the potential to significantly impact individuals, families, communities, the economy, and Australia's long term economic and social well-being.

We also recognise that the NEM is facing a period of significant change and uncertainty driven by rapid changes in technology and generation sources, increased community demand for environmentally responsible outcomes, significant changes to the regulatory and political landscape and greater consumer involvement in the management and production of energy.

The existing NEM structure with strong open competition in generation and retail has served the Australian community well for the past 20 years, particularly during the transition from state-owned and centrally-managed electricity commissions.

One of the strengths of the design of the NEM is that by being driven by the long-term interests of consumers, and encouraging the use of market solutions to address challenges, it has been able to adapt and change rapidly at times of significant upheaval. These changes have been accompanied by improvements in reliability, reductions in costs, increased flexibility, support for innovation and the enablement of world leading levels of variable renewable energy generation.

The current challenges identified by the ESB are reflective of real issues which must be addressed to ensure that the NEM remains a "fit for purpose market framework" beyond 2025. However, it should not be assumed that because the NEM is facing different challenges (in reality, more than the many it has addressed over the past 20 years), that the current framework is obsolete. There may need to be a change in the temperature, but we need to be very careful not to throw the baby out with the bathwater.

For this reason, we consider it imperative that the assessment framework identifies genuine improvements to the current market framework that:

- ensure that such improvements address the challenges identified;
- do not create significant economic inequalities between different consumer segments or participants; and
- are sustainable for the long term in a changing and uncertain environment.

The key measure for such a framework must be consumer outcomes and a clear demonstration that consumers will be provided with long term improvements in their energy supply, in terms of cost, reliability and sustainability. One of the key concerns in understanding if outcomes are successful is to ensure appropriate measurements are in place and that the known benefits are accurately assessed and that they significantly outweigh the costs and risks to the market generally.

The five key challenges

MEA Group agrees that key challenges for any proposed change include:

- the importance of ensuring that innovation that benefits customers continues to be encouraged,
- that the investment signals to ensure reliability remain in place and are clear and effective,
- that the ability to maintain a secure and resilient system remains,
- that customer-owned and managed energy supply (e.g. solar panels, batteries) can be appropriately integrated, and
- that low-cost low emission renewable energy generation can be integrated into the system, notwithstanding its variable nature.

Please find below our responses to the questions raised in the Paper.

Analytic Approach

1. What scenarios and shocks should be used? How should these be used to test market design?

   One of the key drivers of this review is that the market is facing significant uncertainty and rapid change. It is almost impossible to forecast the expected nature and pace of such change and the likelihood of various shocks occurring. For this reason, it is important that the assessment framework considers a robust range of potential scenarios to ensure that any proposed change will be truly fit for purpose for the future market environment.

   Any market design must be assessed against such a full range of scenarios to ensure it is appropriate in all, (or at least most) expected outcomes. A design which is excellent in 9 of 10 cases would be disastrous if the actual outcome we experience is most like the 10th case. In a time of uncertainty and rapid change, the most appropriate and fit-for-purpose design is the one with the greatest flexibility in any scenario. This is important to note as any new environment is unlikely to remain static.

2. How can market and economic modelling best be used to evaluate individual components of market design or the end-to-end market design?

There are clear limitations to the value and utility of market and economic modelling. Difficulty in developing truly representative market models with a clear understanding of the range of potential inputs, means that at best, models will be a guide to some potential outcomes and not be able to demonstrate with any certainty expected or actual outcomes.

Nonetheless, such models can be an important tool in assisting in making wise judgements about the expected benefits and disadvantages of particular proposals. The models should not be used in some simple mathematical weighting, particularly in an environment of significant uncertainty.

The models can play a particularly useful role in identifying proposals which may carry a greater risk of substantial negative outcomes when compared to those models which produce better outcomes across a range of potential scenarios.

3. Is the assessment framework appropriate to evaluate the effectiveness of future market designs? What else should be considered for inclusion in the assessment framework?

MEA Group consider the assessment framework to be fit for purpose, however we would suggest that the principle "Resilience to externals shocks" be expanded to include resilience to alternative developments over time and not just those that result in a shock (e.g. how does the proposal react to gradual changes in technology and comparative technology costs).

Australia's energy transition and implications for market design

4. Have we identified all of the potential challenges and risks to the current market? If not, what would you add?

By its nature, the future is difficult to predict and while the ESB appears to have identified many of the potential challenges and risks to the current market, one can never be certain that significant 'unknown unknowns' may not come into play.

For this reason, it remains important that the assessment considers not only all the known knowns and known unknowns but considers how resilient the proposal is to addressing surprise events (i.e. unknown unknowns).

5. Which of these challenges and risks will be most material when considering future market designs and why?

Given the uncertainty around potential future outcomes, it is not appropriate nor possible to assign a definite materiality weighting to each of these challenges and risks. Again, this highlights the need for the ESB to make considered judgements about the resilience of any proposal in a changing and uncertain environment.

6. Which (if any) overseas electricity markets offer useful examples of how to, or how not to, respond to the challenges outlined in this paper?

While some overseas markets may provide some indications of potential responses, Australia's unique industry structure, significant physical infrastructure, advanced level of renewable energy penetration and energy affordability challenges, mean that no one overseas market will be able to provide an example or solution fit for purpose in Australia.

If you have any queries or would like to discuss any aspect of this submission please do not hesitate to contact me.

Yours sincerely,

Chris Murphy
Strategic Advisor
Powershop Australia Pty Ltd
Meridian Energy Australia