



EnergyAustralia

LIGHT THE WAY

18 May 2020

Dr Kerry Schott
Mr John Pierce
Ms Clare Savage
Mr David Swift
Ms Audrey Zibelman
Energy Security Board

EnergyAustralia Pty Ltd
ABN 99 086 014 968

Level 33
385 Bourke Street
Melbourne Victoria 3000

Phone +61 3 8628 1000
Facsimile +61 3 8628 1050

enq@energyaustralia.com.au
energyaustralia.com.au

Lodged electronically: info@esb.org.au

Dear Energy Security Board Members,

Energy Security Board – Moving to a two-sided market – April 2020

EnergyAustralia welcomes the opportunity to comment on the Energy Security Board's (ESB's) information paper on moving to a two-sided market.

EnergyAustralia is one of Australia's largest energy companies with around 2.5 million electricity and gas accounts in NSW, Victoria, Queensland, South Australia, and the Australian Capital Territory. We own, operate and contract an energy generation portfolio that includes coal, gas, battery storage, demand response, solar and wind assets. Combined, these assets comprise 4,500MW of generation capacity.

EnergyAustralia is dedicated to building an energy system that works for all households and businesses, one that drives emissions as low as possible and provides secure, reliable and affordable power. We are therefore supportive of the ESB's efforts to advise on a long-term, suitable market framework to support system security and reliability in the National Electricity Market (NEM).

Introduction

The ESB's information paper outlines an ambitious reimagining of the design of the NEM. It proposes re-evaluating many aspects of the current design and whether these remain suitable for a future characterised by higher levels of supply and demand variability, increased volumes of distributed energy, and change in level of customer engagement. The paper contemplates, among other changes;

- redefining participant categories under two broad groups 'users' and 'traders',
- the scheduling of demand,
- changes to network access and charging, and
- and the introduction of greater control of distributed resources.

The core aim of the ESB appears to be to increase direct customer participation in the wholesale market in an effort to improve overall market efficiency.

Over the past decade, customers have been gaining increased access to a wider range of products and services, facilitated by technology improvements, retailer innovation, and increased customer interest. Growth in this domain is far from reaching maturity. The ESB appears motivated to influence the rate of change by regulating the timing and direction of the market, thereby assuming that the current regulatory environment is causing unnecessary delay. However, it is not clear that the changes proposed will increase customer participation, nor reduce the overall costs of the market's development. An organic rate of change allows customers to develop an understanding and interest in changes, and allows retailers and customers to learn before solutions are scaled up, driving a cost-efficient uptake of changes. Dictating the pace of change with regulatory reform is likely to increase costs and embed particular outcomes that may not be efficient.

We welcome further work by the ESB on identifying the current barriers to increased participation and adoption of different retail products and services. In progressing this stream of work, we ask that the ESB engage directly with customers on this question, through the use of surveys and trials, and that the ESB assess the current technological capability to support the proposed reforms, before mandating an approach. Dynamic efficiency should be a key assessment criterion for the ESB and the question is whether this is best achieved with regulated direction, or organic market development.

This submission outlines questions for consideration by the ESB in relation to the key barriers to participation and how to resolve these, the transition path of demand-side capability and the need for this reform, the impact and role of the reliability standard, the definition of the participant categories, mapping of existing retailer obligations to 'traders', and the ramifications of different forecast commitment periods on efficiency.

The proposed reforms are broad and we welcome future engagement on other elements of the design as work progresses through 2020.

Making the case for change: Further work needed

The retail market has been steadily developing the capability to offer customers greater flexibility and incentives for responding to price signals. There is value for retailers to develop relationships with price responsive customers and competitive pressures incentivise delivery of products and arrangements that are valuable to customers. These relationships are rapidly evolving as supporting technologies continue to improve, new business models and relationships emerge, and customers and service providers pinpoint what works best. Retailers are investing in technological research, and partnering with new businesses with innovative ways of engaging with customers.

The ESB has presented a model which seeks to regulate this evolution in a particular direction, with a particular design structure. We urge the ESB to use caution. Regulations are typically introduced where markets are failing to deliver economically efficient outcomes. When used correctly, they can maximise social benefits by addressing a market failure such as a negative externality. When used incorrectly, they can increase costs by mandating outcomes that are inefficient and that impose unnecessary

expenditure. The question then, is what market failure(s) is this regulation aiming to address?

It appears the ESB's primary concern is the under-participation of customers in the market.

The ESB's goal for this reform is to increase customer participation to derive benefits such as greater market efficiencies, reduced system costs and increased consumer choice.

It would be helpful if the ESB could provide greater explanation of why the proposed changes would increase demand-side participation.

- How will the incentives for 'traders' to provide spot-price related products to customers differ to existing retailer's incentives?
- Retail products with direct, or supported¹, price exposure either exist, or are emerging, for both large and small customers. This includes Virtual Power Plants (VPPs) and alternative pricing plans such as pool pass through.² Does the ESB see barriers to customers accessing these products and services? What are these barriers? How this reform will change these barriers?
- How will the framework make it easier for customers to identify products that create value for them? Why would customers prefer to engage with multiple service providers, or 'traders', under the proposed model rather than with a single provider under existing framework?

The ESB has outlined reasons for change in the paper, including growth in consumer demand for distributed energy, developing ability to control load and metering improvements. However, these could be characterised as favourable conditions, or pre-requisites, for such a regulatory model, rather than justification for change.

In outlining the possible transition path, the ESB has presented a spectrum of options from supporting the current organic market development, through to regulated mandatory participation. In determining the best approach, the ESB should identify and compare how each reduces barriers to customer participation and the costs associated with effecting this change. The ESB should include consideration of the current trajectory of the market and likely customer engagement as retailers continue to develop their capability and relationships with customers. Will the organic evolution of the market, or regulated change deliver the greatest value? Are the benefits outlined by the ESB contingent on delivering this reform or can some be delivered by the existing framework?

Transition options: Design for customers

The ESB has presented three options for a possible transition:

¹ Through the use of control devices or customer alerts

² The AEMC's Demand Response Second Draft Determination Paper (March 2020) outlines a substantial number of these developments - see Chapter 3 <https://www.aemc.gov.au/rule-changes/wholesale-demand-response-mechanism>

- 1) increased incentives for participation,
- 2) mandatory for particular groups such as large customers, or large retailers, and
- 3) mandatory participation for all consumers.

The ESB has not provided any detail on the nature of the incentives that could be introduced to increase participation so it is difficult to assess the suitability of this option. However, this appears to be the most pragmatic approach to supporting the transition, without imposing additional regulatory costs on customers, and we are interested in exploring this avenue further with the ESB.

The second option presents challenges both economically and practically.

Mandating large customer participation is unlikely to achieve significant change in behaviours. Large customers, broadly, have the capability now to be price responsive by seeking pool-price related contracts, or becoming scheduled, and choose to do so where it is feasible for their business. It is unclear what changes under the two-sided market proposal would make engagement easier or better value for these customers. Large customers are focussed on delivering their core business and this may not be compatible with scheduling production around complex dispatch outlooks. There is a distinct difference between choosing to reduce consumption on a small number of peak demand days, and a continuous response that involves moving production schedules daily as dictated by electricity market prices. Those that wish to do this to reduce costs, can already choose to do so through their retailer.

Mandating participation for some retailers implies the introduction of a net market (as opposed to the existing gross market). The ESB should assess this attribute of the design and its merits and drawbacks.

Mandatory participation for all consumers will impose significant fixed costs on customers. Significant penetration of distributed energy and control capability will be required before benefits at scale are observed. The ESB should consider which segment(s) of customers are most capable of providing a response, most interested in providing a response, can provide the largest aggregate response, and have the lowest transition costs. This will maximise value against any transition costs. To deliver benefits, the question is not which segment is the largest or captures the largest proportion of consumption, but which segment can provide the largest benefit for the lowest cost.

Barriers to transition: Technical capability & consumer engagement are key pre-requisites for transition

A core requirement of the ESB's vision will be installation of appropriate telemetry for settlements and market operations. There is a clear trade-off between cost and granularity and real-time provision of information. The industry is in the process of transitioning its metering stock and the benefits of this change are yet to be realised.³

³ This includes Competition in Metering reforms (Expanding competition in metering and related services) NERR Rule 2015 No. 1 & NER Rule 2015 No. 12) and the Victorian Advanced Metering Infrastructure (AMI) reforms.
<https://www.aemc.gov.au/rule-changes/expanding-competition-in-metering-and-related-serv>
<https://www.energy.vic.gov.au/electricity/smart-meters>

The ESB should move with caution to ensure it does not create millions of dollars-worth of stranded assets by making these assets redundant.

Technology capability is likely to be a critical component of the cost benefit analysis and core component of the timing for any transition. Should the ESB choose to regulate the timing and nature of increased demand side engagement, it should also assess the technical capability of available metering and cost curve trajectories to identify the optimal point for deployment.

A key requirement for success of this reform is widespread customer participation. Consumer willingness for this model is not described by the ESB. While consumers have showed increasing interest in distributed energy, there has not yet been large uptake in control devices. There has, to-date, been limited uptake of time of use tariffs. The reasons for this are worth exploring further if the ESB wishes to improve customer engagement, and responsiveness to, the wholesale price. Further, the proposed model implies that customers may be able to engage with multiple parties for different components of their load. For example, one 'trader' may be responsible for the controllable portion of the load, and another 'trader' for the remaining load. There is a risk that complicating customers' engagement with the energy sector creates barriers to entry for participation. Such a reform will require significant customer education and support to shift perception and understanding of the delivery of energy to one which is segmented and serviceable by multiple providers. It is not apparent that these reforms have been designed with ease of use and understanding by customers in mind.

Comments on specific design elements presented in the paper

- **Re-defining market participant categories**

The ESB has proposed a redesign of the classification system used to assign rights and responsibilities relating to participation in the wholesale spot market and access to the electricity system. The change seeks to re-align the classification system with how participants interact with the market and AEMO's requirements to operate a secure system. As the grid and generation technology and interactions develop and evolve, it is a worthwhile exercise to reconsider the needs of AEMO and classify requirements on market participants accordingly. However, extreme caution must be taken. Many thousands of clauses are dependent on the existing classification system and corresponding rights and responsibilities of each participant type. Unwinding the re-framing these relationships could be a minefield of unintended consequences if done in haste, or with a singular purpose in mind.

The ESB's proposition is for participants to be classified as either 'traders' or 'users'. We consider this approach to be too simplistic to clearly capture the nature of participants' engagement with the market. For example, how will the role and categorisation of network services be captured within the framework? The boundaries of the categories will need further definition.

Second, this framework seeks to classify participants based on their direct interaction with the market, but fails to appropriately recognise other services that are provided by retailers that are not explicitly considered in the wholesale market rules. For example, retailer provision of hardship programs, protections for life support, Retailer of Last Resort, credit risk management and obligation to supply. It is not apparent which entity

will continue to provide these services, nor whether the customer's entire load will be covered by such provisions.

- **Reliability Standard and the Market Price Cap**

An area for the ESB to assess in further detail is the impact on, and use of, the reliability standard. What role can a two-sided market play in enabling customers to reveal their individual value of reliability in real time. For example, consumers (or users) may choose to bid below the level of the Market Price Cap (MPC) if they preferred lower levels of reliability.

As part of this analysis, the ESB should consider implications for the Reliability Standard and the setting of the MPC. The existing MPC is below the value of customer reliability, as determined by the AER. On the one hand, by capping the market price, the demand side response is effectively dampened and the market is not fully two-sided, reducing its ability to fully deliver efficiency benefits associated with greater demand-side participation. On the other, increasing the MPC could lead to unmanageable risk exposure for market participants.

Defining forecast commitment period

In assessing the merits of this proposal, further work is needed to define the commitment period for 'traders'. In particular, the forecast horizon that will be provided to AEMO, how and when forecasts can be re-submitted, and when forecasts become binding. The benefits of obtaining forecasts from the demand side will be contingent on how recently these forecasts were produced. The use of commitment to forecasts restricts flexibility and short-term market efficiency. It also implies the need for a balancing market in real time which requires further detail.

Assessment Criteria

The ESB have outlined criteria against which to assess the proposed reform. This includes:

- ability to deliver a reliable and secure system,
- appropriate risk and cost allocation,
- provision of appropriate market signals and competition,
- technology neutrality, diminution of information asymmetries, integration with related markets, and
- minimising regulatory and administrative costs.

The ESB should also consider the dynamic efficiency costs of the transition period, that is, the sovereign risk posed by significant reform to the market and the costs to consumers of the transition. The ESB should also outline how this assessment framework ties back to the National Electricity Objective (NEO).

Conclusion

In conclusion, critical assessment is required as to whether the transition of the market requires a heavy-handed regulatory approach, or whether the existing rules can support a more organic development, supported by judicious modifications to the existing framework that incentivise greater participation.

The ESB's objective for greater participation of the demand side is already developing as retailers and customer work together to determine the best approach, supported by increasing technological capability. It is unclear how regulating such changes, to bring about an earlier evolution, or to structure the market in a particular way, will be more dynamically efficient and lower overall costs for consumers. We are unconvinced at this stage that such a reform would lead to a material change in outcomes for consumers, and the costs of such a transition need to be carefully considered.

Nevertheless, we support the ESB's interest in increasing customer participation and welcome continued engagement. We suggest that the ESB focus on incentives for greater market participation, rather than prescribing a revolutionary change that sets increased costs but no additional benefit over a market-driven evolution. We also suggest that the ESB concentrate its focus on resolving mounting issues with market security and reliability first, such as provision of essential ancillary services such as inertia. Operating reserves/dispatchable resources, and system strength should be first priority for the ESB to ensure the market remains reliable and secure during, and after, the transition.

We would welcome the opportunity to discuss this submission further with you. Should you have any questions, please contact Georgina Snelling by phone on 03 9976 8482 or via email (georgina.snelling@energyaustralia.com.au).

Yours sincerely,

Sarah Ogilvie

Industry Regulation Leader