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Submission : AEMC Regulatory Sandbox Toolkit Proposal.
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To : John Mackay

About BOOMPower:

BOOMPower is an innovative software business, servicing the distributed energy solutions market. We automate and integrate the data gathering, business case development and procurement process for distributed energy solutions. This simplifies the customer experience and significantly reduces the cost of assessing and delivering distributed energy solutions at scale. Our platform includes a real time marketplace solution for selling solar, storage and related products direct to consumers, and can be configured to suit the needs of all stakeholders in the distributed energy supply chain under white labelling arrangements.

BOOMPower's interest in the Regulatory Sandbox:

The relatively long and slow evolution and adaptation of the centralised energy supply chain can be seen in stark historical contrast, to the relatively rapid pace of technological change that a wide range of markets have seen, since the emergence of digital technology, and large-scale automation in manufacturing. As changing technology costs make new energy solutions possible and viable, particularly at the distributed level, it is natural that market rules, systems and processes, may find it hard to adapt to the change and manage that change for maximum benefit.

Our business, and our customers, are technology, brand and supply chain agnostic. They are typically driven by price, and performance with a strong environmental overlay. We often see market rules, systems and processes that have been designed with good intention, around a one-way centralised supply chain, distorting customer preferences in an unhelpful way - for example making a higher cost energy solution more attractive, simply because of the ease with which it is delivered by incumbent businesses.

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Multi-residential apartment buildings typically defaulting to individual supply contracts, rather than an embedded network, is one such example - the default of individually purchasing energy from retailers, with free market choice, is the simpler, yet higher cost option in the vast majority of cases.

We think it is uncontroversial to say customer-centric innovation typically occurs at the margin of an industry, and is pursued most aggressively by new market entrants, albeit with a few notable exceptions. In that context, in order to realise the full benefits of energy market innovation in a streamlined way, it is very important that institutions and management regimes for the energy market are designed to be “fit for purpose”.

The Regulatory sandbox concept appears very much “fit for purpose” given the overarching need for accelerated innovation and is a welcome development.

Our submission is detailed below.

QUESTION 1: INNOVATION INQUIRY SERVICE

Will the proposed design of the innovation inquiry service improve the level of guidance available to proof-of-concept trial proponents?

THE REGULATORY SANDBOX TOOLKIT

The proposed process and toolkit options, outlined for the inquiry service appears sound. We have had experience working with the AER and other stakeholders on these issues, effectively using a sandbox style of process albeit informally, to good effect.

As important as the toolkit options, will be how the sandbox team is resourced, and ultimately empowered, to serve its function. Organisational culture has a strong influence on risk taking, with organisational trust central to fostering innovation effectively.

We believe it will be important that the sandbox function, whether it is “housed” within the AER or elsewhere, has formal, structural separation from the parent organisation. That is, if housed within the AER, the sandbox team should not necessarily be accountable to the same management structure, as the broader AER organisation.

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On balance, we believe the sandbox function should err on the side of taking risk. That is, where there is doubt as to whether the benefits will outweigh costs or risks from a proposed rule waiver, there should be a preference towards taking risk, so long as the cost and risk, in absolute terms, is contained.

In other words, the sandbox should be part of, and seek to create a “safe to fail” environment for innovation, where the cost of failure is low, but the gains from success is high.

REGULATORY GUIDANCE

We support the move to establish a “first stop shop” as opposed to a “one stop shop”. While it is naturally tempting to seek to create a one stop solution for all new market innovation, political cycles across States and nationally will move differently to those of natural market authorities such as AER, AEMC, and AEMO. Involving agencies such as ARENA, or even State based policy departments in the sandbox arrangement is likely to create political overlays that could hinder, as much as help, the sandbox process.

Consideration will need to be given as to how the commercial interests of those using the sandbox mechanism would be protected. For example, it is likely that commercially sensitive projects or plans may be discussed as part of the sandbox process. A simple, streamlined mechanism for managing confidentiality will be essential.

In terms of advisory services - we recommend exploring the potential to use an AI bot as a screening platform - this could be easily trained to match queries to relevant sections of the market rules, and nudge users of the service to read those sections of the rules more closely. In our experience, we have had many instances where energy market myths have built up over time, but once those myths are challenged on a reading of the rules, they dissipate. An AI bot could be a low cost, easy way of providing this gateway function.

The suggestion that the AER could capture and publish information regarding how the guidance service has been used is a very good one. This type of iterative, learning feedback loop, is an important aspect of service provisions particularly in the context of innovation. An annual publication could even be used to distill frequently asked questions and standardised advise on regularly asked questions.



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QUESTION 2: AER SANDBOX WAIVERS SCOPE OF POWER

(a) Do you agree with the proposed extension of the powers of the AER to grant regulatory relief to innovative trials facing a regulatory barrier?

(b) Do you agree the waiver power should encompass the National Gas Rules? Why or why not?

We agree with the proposed extension of the powers of the AER to grant regulatory relief, and that is should encompass Natural Gas Rules - gas and electricity markets are increasingly intertwined and from a customer’s perspective, are simply competing energy supply options.

We caution against making the frameworks around waivers too rigid in the first instance. Innovation by nature typically occurs in spaces of ambiguity. Often, this results in the costs and benefits of innovation appearing ambiguous, or simply being highly subjective.

A rigid framework, or even the rigid application of a framework around assessment of projects, risks shutting out innovation, simply due to ambiguity, or entrenched subjective decision making bias.

More important than guidelines and frameworks around waivers, will be how the sandbox function is resourced and managed structurally, and how this affects its internal culture and decision making preferences. As above, we believe there should be a bias towards accepting risk, where the costs and benefits are ambiguous and where the risks are contained.

Our experience is that communities and consumers typically have a far higher tolerance for risk and failure, than market authorities and or incumbent energy suppliers might assume, particularly for projects that are designed to test and develop new technologies or models that will help them in the long run.

Evidence that consumers and/or communities involved in the trial of a new technology, model or process requiring a waiver, are willing to accept risk, and they understand that risk, should be strongly weighted in decision making.

Trials limited in time and scope, reporting requirements, the need to retain consumer protections and informed consent, and the ability to extend waivers all appear to be sensible conditions of waivers.

.....Submission ends.....