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Submission in response to the Regulatory Sandbox Arrangements to Support Proof-Of-Concept Trials

Battery Storage and Grid Integration Program

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Introduction

We thank the Australian Energy Market Commission (AEMC) for the opportunity to respond to the Regulatory Sandbox Consultation Paper (henceforth the Paper). The issues presented are of great significance to the future evolution of the energy market specifically, and the electricity system more broadly.

We strongly support the creation of a formal regulatory sandbox as we believe this will facilitate innovative capabilities, business models, and customer representation models that will culminate in reducing consumers bills, while strengthening grid security and reliability, and reducing carbon emissions.

Context

The transition of Australia’s electricity system is widely acknowledged to be at a critical turning point¹. The complexity, speed and impact of these changes are formidable, making active regulatory management of the market and system essential to achieving desirable outcomes.

As noted in the Paper, today’s complex regulatory arrangements and opaque institutional arrangements present a barrier to new entrants, and we believe, to innovation more broadly. While the AEMC, Australian Energy Market Operator (AEMO), Australian Energy Regulator (AER) and Australian Renewable Energy Agency (ARENA) are working to support important proof-of-concept trials and demonstrations with specific exemptions within the existing regulatory framework, we believe that these provisions should be expanded and formalised. The Paper is right to highlight the limitations of the tool set currently available to provide regulatory flexibility, such as AER “no action letters” and waivers. These tools are too cumbersome to keep pace with fast-changing innovations and fall short on providing participants with adequate protections to mitigate investment and innovation risks. Furthermore, the current framing reinforces the impression that accommodations will only be made for major players.

In this context, we welcome this review as an opportunity to shift the environment from one where innovations are seen as exceptions to one where they are the norm and are facilitated by a clearly defined regulatory sandbox.

As the complexity of the NEM and the diversity of market participants and technologies increases, the imperative for practical trials and demonstrations increases. We believe that a well-designed sandbox and framework for regulatory advice are essential for capitalising on the opportunities emerging from Australia’s leading position in the global energy transition.

¹ Dr Alan Finkel AO, Chief Scientist, Chair of the Expert Panel, 2017, Ms Karen Moses FAICD, Ms Chloe Munro, Mr Terry Effeney, Professor Mary O’Kane AC, “Independent Review into the Future Security of the National Electricity Market”, <https://www.energy.gov.au/government-priorities/energy-markets/independent-review-future-security-national-electricity-market>

Design

We highlight below three design aspects that we believe are crucial to the success of a regulatory sandbox in the Australian context.

1. **Simplicity and speed.** The design of a sandbox must prioritise simplicity to be accessible to all innovators. Clarity is also vital to inform investors and other governance bodies of any foreseeable embodied risks. Such a design goal is embodied in OFGEM's phrase "fast, frank advice".
2. **Sandbox and advice.** The UK experience underscores the crucial role of regulators to provide "specialist advice to help shape the services to work around regulatory obligations". We encourage the AEMC to include a broad suite of tools within the concept of a regulatory sandbox, including technical advice to innovators as well as internal innovations for new regulatory approaches. Achieving optimal customer outcomes will require collaboration between regulators and innovators to develop innovative solutions, safeguarded by appropriate consumer protections.
3. **Inclusivity and diversity.** We believe that there exists a large pool of latent innovative ideas within communities outside of startups and incumbents, including in universities, community groups, and community and non-profit organisations. The energy sector stands to be greatly enriched by opening the door to these ideas through lowered regulatory barriers to trials and demonstrations. An approachable sandbox may also promote and safeguard greater involvement from traditionally constrained organisations, such as the distribution and transmission network operators, to experiment with pilots.

Examples

In developing the requirements of a sandbox it may be helpful to consider concrete examples. Below we outline several of the innovations that we see as promising candidates for trials enabled through a regulatory sandbox arrangement.

- **New customer representation models.** A regulatory sandbox would be an ideal environment in which to test and demonstrate the value and risks of new customer representation models. These may include:
 - An understanding of the benefits and opportunities for 'Aggregators' that aggregate distributed energy resources (DER) and also represent customers in multiple energy, ancillary and network services markets. An early exploration of some possible customer representation models are detailed in a recent report from OFGEM².
 - New models of interaction between customers, retailers, asset owners and operators. In particular, a regulatory sandbox could underpin trials of community energy models, many of which are currently developing in partnership with ARENA, network businesses and community groups.

² ESP Consulting, "Retail Research into Customer Switching and Supply Disintermediation", https://www.ofgem.gov.uk/system/files/docs/2018/07/retail_research_-_report_on_supply_disintermediation.pdf

- **Novel tariffs.** New representation models will be complemented by novel network and retail tariffs. These will likely address two pressing demands:
 - Identifying and enabling multiple value streams for supporting the electricity system and market operation using embedded generation, battery storage and electric vehicles.
 - Providing a broad and equitable range of incentives to optimise the utilisation and management of the grid for the benefit of all customers, the market operator and networks. Such tariffs provide an important case study for balancing flexibility with consumer protections.
- **Tiered regulations.** Regulatory innovations could underpin the investigation of tiered, fit-for-purpose approaches to regulation that provide appropriate consumer protections while encouraging disruption through new entrants. For example, this could provide a fertile testing ground for different regulatory environments for electricity retailers of different sizes. Such a framework would stimulate retail competition, just as similar approaches have in the fin-tech space. Precedents for tiered regulation can be found in the financial sector where ASIC requires different regulatory and reporting obligations for sole director private companies than it does for multi-director private companies, or public companies.

Conclusion

We commend the AEMC's for leading the discussion of the important issues of regulatory sandboxes and new avenues for increased engagement between regulators and innovators. We strongly support both initiatives as vital steps for unlocking better value for consumers by harnessing the benefits of innovations while ensuring appropriate customer protections. We look forward to engaging further in these important discussions about the future of our electricity system.