

31/01/2019

Mr John Pierce
Chair
Australian Energy Market Commission
PO Box A2449
Sydney NSW 1235

Lodged online via: www.aemc.gov.au

Dear John,

Regulatory sandbox arrangements – consultation paper

TransGrid welcomes the opportunity to respond to the AEMC's consultation paper in relation to regulatory sandbox arrangements for proof-of-concept trials in the national electricity market (NEM).

TransGrid is the operator and manager of the high voltage transmission network connecting electricity generators, distributors and major end users in New South Wales and the Australian Capital Territory. TransGrid's network is also interconnected to Queensland and Victoria, and is instrumental to an electricity system that allows for interstate energy trading.

We support the need for sandbox arrangements in the NEM

Australia is in the midst of an energy transformation. This is primarily driven by changing community expectations and choices, advances in renewable energy technologies, retirement of existing generation, and the adjustments required in Australia's economy to meet our international climate change commitments. These changes raise complex issues in relation to the design of the NEM, which must adapt to these changes and provide the basis for low emissions, reliable supply at the lowest cost to consumers over the long run.

In this context, TransGrid supports the development of a formal regulatory sandbox framework for the NEM. An appropriately designed regulatory sandbox framework would be a useful tool for trialling technical innovations required to facilitate the transformation of the energy sector and the regulatory reforms required to support that transformation. The introduction of a regulatory sandboxing framework would send a clear signal that innovative approaches are welcome.

A regulatory sandbox framework for the NEM would allow businesses to determine and test the innovative technical solutions and business models that drive the greatest efficiencies and create value for energy consumers. Accordingly, a regulatory sandbox framework could help to identify the regulatory changes that are most critical to drive this value for consumers. A sandboxing framework would also reduce uncertainty and risk in the testing stage for innovations, and allow the regulator to be more adaptive in its response to change in the industry.

The need for a formal sandbox framework is highlighted by a recent innovative approach to metering identified and tested by TransGrid. The proposed metering solution would have been a lower cost outcome for consumers. The solution was ultimately not able to be used because it was not consistent with clause 7.8.2(b) of the National Electricity Rules and AEMO's metrology procedures, even though the solution would outperform existing metering arrangements. A formal sandboxing arrangement for the NEM could allow such technical solutions (and the regulatory changes to support them) to be developed and tested in a timely fashion.

There are many other areas in which transmission networks could bring forward innovative technical solutions and business models for testing in a sandboxed environment. For example, testing different approaches to streamlining the generator connections process, to funding the development of

renewable energy zones, or testing new technical solutions to manage the power system securely and reliably. Sandboxing arrangements are also appropriate to facilitate innovation and change in other parts of the NEM supply chain including distribution networks, wholesale and retail markets.

Well-designed sandbox arrangements will be critical for its success

The process for a regulatory sandbox framework should take into account the governance structure of the NEM and bring together relevant stakeholders for proposed trial projects. For example, one project may require more involvement from the AER, while another may require greater involvement from AEMO. The AEMC should also be afforded a role that is appropriate to allow it to meaningfully learn from new regulatory approaches applied in trials. Overall, the process should be adaptable and agile so that red tape is significantly reduced for trial projects, not increased.

Approval of projects should be principles based, with project proponents required to show that their project:

- is genuinely innovative
- is likely to meet the National Electricity Objective
- will not adversely affect power system safety, security or reliability
- reduces or does not increase greenhouse gas emissions
- would not be able to proceed under existing rules and regulations, or there is uncertainty regarding whether it would be able to proceed under existing rules and regulations
- is capable of being tested in a trial environment
- has appropriately defined boundaries and governance processes commensurate with the nature and scale of the proposed trial (including a review and learning cycle at the conclusion of the project, and potentially stakeholder co-design and knowledge sharing as appropriate)
- has appropriate consumer protections in place, and
- has a clear pathway to transition the project out of the trial environment.

The arrangements should also retain some flexibility for adjustments to be made during the course of trial projects, and on conclusion of trial projects. This flexibility could be used, for example, to allow the ability to mitigate any unforeseen consequences for consumers as they arise, or to allow a project to continue in a regulatory sandbox for a further limited period of time until the regulatory framework is adjusted to allow the product or business model to continue to operate.

In addition to the arrangements introduced by Ofgem, we suggest the AEMC look to sandboxing arrangements in other jurisdictions and industries. For example, the Singaporean Energy Market Authority has introduced a regulatory sandbox arrangement for the energy sector that appears to include greater flexibility than the Ofgem arrangements in some respects. Sandboxing arrangements are relatively common in other highly regulated sectors that are experiencing rapid transformations, such as finance and health. Further, the NSW government has endorsed the use of sandboxing by its regulators and encourages individuals and businesses to seek their use through Innovation NSW.

We appreciate the opportunity to comment on the AEMC's consultation paper and look forward to engaging with the AEMC and other stakeholders further. If you would like to discuss our submission, please contact Neil Howes, Acting Head of Public Policy on 02 9284 3748.

Yours faithfully



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