TasNetworks
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Tasmanian Networks Pty Ltd
ABN 24 167 357 299
PO Box 606
Moonah TAS 7009

30 January 2019

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

Via online submission

Dear Mr Pierce,

RE EPR0068 – REGULATORY SANDBOX ARRANGEMENTS TO SUPPORT PROOF-OF-CONCEPT TRIALS

TasNetworks welcomes the opportunity to make a submission to the Australian Energy Market Commission's (**AEMC**) consultation paper on Regulatory Sandbox Arrangements to Support Proof-of-Concept Trials.

As the Transmission Network Service Provider (**TNSP**), Distribution Network Service Provider (**DNSP**) and jurisdictional planner in Tasmania, TasNetworks is focused on delivering safe and reliable electricity network services while achieving the lowest sustainable prices for Tasmanian customers. This requires the prudent, safe and efficient management and development of the Tasmanian power system. It also requires innovation, creativity and ingenuity in finding optimal service solutions for customers. In this regard, TasNetworks is supportive of AEMC's efforts to review regulatory sandbox arrangements which can only help with identifying and evaluating ideas to continually support and improve customer outcomes.

TasNetworks supports Energy Networks Australia's (**ENA**) submission and would like to make several further comments with a particular focus on the Tasmanian context. The key points in this submission are:

- TasNetworks considers that there are current market regulations and processes that can act as constraints and barriers to proof-of-concept trials. These can rule out trials entirely but may also limit the scope of trials that do go ahead.
- TasNetworks therefore supports the use of regulatory sandboxes to overcome these barriers and enhance proof-of-concept trials within the National Electricity Market (**NEM**).
- TasNetworks suggests that the objective of sandbox arrangements should be to explore how innovation and efficiency in the NEM might be enhanced without undue risks to customers, infrastructure, markets and other NEM participants.

- TasNetworks supports the use of a regulatory sandbox framework to define how and when sandboxes can be used, who they apply to, what success looks like and what obligations proponents have in terms of customer protections, knowledge sharing and confidential information.

- To guide adoption of reforms across the market, TasNetworks suggests that the National Electricity Objective (**NEO**) be relaxed for rules that are the subject of regulatory sandboxes. In this manner, space could be given for the implications of rule changes to be explored and tested ahead of time, particularly in those case where rule change outcomes are uncertain and/or there is no clear rule consensus.

TasNetworks responses to individual questions are provided below and we welcome the opportunity to discuss this submission further with you. Should you have any questions, please contact me via email (tim.astley@tasnetworks.com.au) or by phone on (03) 6271 6151.

Yours sincerely,

Tim Astley

Team Leader NEM Strategy and Compliance

QUESTION 1: OTHER SANDBOX EXAMPLES

Are there other examples of regulatory sandbox arrangements that are relevant when considering these arrangements for the NEM?

Aside from the examples mentioned in the consultation paper, TasNetworks considers that developments in the South West Interconnected System of Western Australia (**SWIS**) would be relevant and instructive. For example, the learnings from Horizon Power's regulatory trial into the application of unregulated systems at the fringes of the grid. Beyond this, and although a Fin-Tech application, TasNetworks notes that the Monetary Authority of Singapore has also used regulatory sandboxes to facilitate greater innovation in the Singaporean financial sector.

QUESTION 2: OTHER RELEVANT TRIALS

What other proof-of-concept trials are relevant when considering formal regulatory sandbox arrangements for the NEM?

TasNetworks' emPOWERing You trial is one other relevant example beyond those detailed in the consultation paper. The trial's purpose has been to explore how customers react to different network charges including those that more accurately reflect the costs of using the electricity network at different times of day. Further details can be found on TasNetworks website.

QUESTION 3: BARRIERS TO PROOF-OF-CONCEPT TRIALS

(a) Are proof-of-concept trials being inhibited by current market regulations or processes?

(b) If so, what are the potential barriers to proof-of-concept trials that might be addressed by a regulatory sandbox initiative?

TasNetworks considers that there are current market regulations and processes that can act as constraints, for example, by impeding the exploration of trials which may conflict with current rules. These constraints can have two effects. Firstly, they may limit the scope of trials that do occur. This has been TasNetworks experience with both the CONSORT Bruny Island Battery Trial and the emPOWERing You Trial with the scope of each reduced because of regulatory concerns.

Secondly, they can rule out trials entirely because they impose costs in both time, money or complexity that are prohibitive. A perfect example of this concerns a proposed embedded network and microgrid project at Nubeena on the Tasman peninsula. One of the goals of the project is to allow residents within the network to trade energy amongst each other incorporating cost reflective network pricing. However, the regulatory barriers have meant this has not been implemented to date.

Applied to just this one example, a regulatory sandbox could be used to:

- reduce the financial and temporal trial costs by obviating registration and licensing requirements;
- reduce the number of stakeholders required to make a project work, e.g. by allowing a DNSP to operate as a retailer; and
- allow exploration of concepts not within, or on the edge of, the rules such as nodal network pricing.

QUESTION 4: ACCESS TO GUIDANCE ON THE REGULATORY FRAMEWORK

(a) Is there a lack of access to guidance for innovative new entrants on navigating the energy regulatory framework?

TasNetworks endeavours to provide as much information and guidance as possible to all new and potential clients on the aspects of the regulatory framework relevant to their business proposal. In some cases very little is required. For example, new transmission connection applicants tend to be larger, more well-resourced and sophisticated entities with a deep understanding of applicable

regulatory obligations such as transmission ring-fencing and transmission connection and planning arrangements.

In other cases, and particularly in the case of micro-generators, more guidance and information dissemination is required. In this situation, TasNetworks considers that new entrants might benefit from other resources beyond those able to be provided by TasNetworks.

(b) If so: What type of guidance is needed? Who should provide it? Should guidance be coordinated across the AER, AEMO and AEMC? How should the provision of guidance be funded? Should an application be required in order to gain access to detailed guidance? If so, what criteria should apply?

TasNetworks considers that the informational resources provided by the market bodies and jurisdictional regulators provide comprehensive coverage of the regulatory frameworks and associated obligations. However, given the voluminous and complex nature of these resources, it can be hard for new entrants, particularly smaller players, to productively engage with. TasNetworks suggests that more bespoke and consultative guidance is provided to remedy this situation. The tailored support and advice provided by start-up incubators such as EnergyLab and the knowledge sharing facilitated by the Australian Renewable Energy Agency (**ARENA**) might be useful models for adoption in this regard. For example, consultative regulatory advice might be jointly provided by the regulators in a coordinated manner with costs recouped on a user pays basis.

(c) Is there a role for binding advice from market bodies on certain aspects of the regulatory framework to support proof-of-concept trials?

Depending upon how the concept of regulatory sandboxes is advanced, TasNetworks considers there may be a role for binding advice to be applied. Guidelines might be a useful, non-binding alternative that could also help with the application of the regulatory framework to support proof-of-concept trials.

QUESTION 5: TRIALS UNDER AER ENFORCEMENT DISCRETION

(a) Is the AER's ability to issue no action letters, provide waivers and exemptions, and use its enforcement discretion sufficient to facilitate proof-of-concept trials in the NEM? If not, why?

TasNetworks considers that no action letters, waivers and exemptions along with enforcement discretion from the AER may not be sufficient to facilitate all proof-of-concept trials in the NEM. As noted in the consultation paper, these actions have limited flexibility and do not address all risks that could curtail trials being undertaken.

(b) Is there a need for a more formal process for proponents of proof-of-concept trials to seek a no action letter?

TasNetworks does not consider that there is a need for a formal process to seek no action letters so long as proponents are aware that no action letters can be sought to help with proof-of-concept trials.

(c) Should no action letters that facilitate innovation or proof-of-concept trials be made public?

TasNetworks supports the transparent provision of information to market participants to facilitate innovation in the NEM. The publication of no action letters and trial outcomes would support this goal and also help to ensure that no duplicative and redundant trials were undertaken.

The one caveat to this position concerns confidential and commercially sensitive information. In this case, TasNetworks suggests that publication include redactions or be detailed in only a general manner to provide sufficient information protection.

QUESTION 6: THE NEED FOR A FORMAL REGULATORY SANDBOX

(a) Would formal regulatory sandbox arrangements, where some regulatory requirements are relaxed on a time-limited basis whilst appropriate safeguards remain in place, serve to better facilitate proof-of-concept trials in the NEM?

As evidenced by the Nubeena example above, TasNetworks considers that regulatory sandboxes might serve to better facilitate trials by providing extra flexibility over the existing trial support options available to the Australian Economic Regulator (**AER**) such as no action letters.

(b) What other regulatory tools are needed to facilitate proof-of-concept trials?

Depending on how regulatory sandboxes are developed, further consideration of funding and funding mechanisms including incentive schemes to better support trials might be warranted. Beyond this, further deliberation on how the outcomes of successful sandbox trials can be best shared, leveraged and implemented should be considered. That is, to ensure that the existing regulatory framework does not inhibit, and instead promotes, the wide spread deployment of innovative practices and technologies. For example, rule changes resulting from a successful sandbox trial might automatically be advanced on an expedited basis.

QUESTION 7: DESIGN OF A FORMAL REGULATORY SANDBOX ARRANGEMENTS, IF REQUIRED

(a) If required, should the objective of the formal regulatory sandbox arrangements be to facilitate further proof-of-concept trials in the NEM? If not, what should the objective be?

TasNetworks considers sandboxes are a means to an end rather than an end in themselves. TasNetworks therefore suggests that a better objective of sandbox arrangements should be to explore how innovation and efficiency in the NEM might be enhanced without undue risks to customers, infrastructure, markets and other NEM participants. In so doing, optimal customer outcomes will be supported.

(b) If required, what metrics should be used to measure the success of a formal regulatory sandbox arrangement?

TasNetworks considers that some success metrics will vary from trial to trial dependent upon the trial purpose and intended outcomes. For example, the metrics associated with a sandbox trial to test application of nodal network pricing on customer behaviour would differ to the metrics used to assess changes in primary frequency control performance from a localised change in Automatic Generation Control (**AGC**) settings. Despite this, some generalised success criteria might include the following:

- Did the trial achieve its intended purpose?
- Did the trial do so within the stated timeframes?
- Were any financial constraints and budgets respected?
- Were risks to customers, business and other NEM participants foreseen and minimised?

(c) If required, what should be the high-level criteria for accessing a regulatory sandbox arrangement?

TasNetworks considers that the following might be usefully included as part of any high-level criteria for accessing sandbox arrangements:

- Is the trial purpose consistent with the objective of the use of regulatory sandboxes, e.g. in promoting innovation and efficiency in the NEM?
- Do trial proponents have the necessary skills, resources and knowledge to achieve the objective?
- Are there any constraints or risks with the trial that should preclude it from being undertaken?

- Is there a clear and feasible path for adoption should the trial prove successful?

(d) How could fairness be addressed in the case where proponents of similar trials apply to access sandbox arrangements but only a limited number of trials can be accepted?

TasNetworks considers that similar trials should be assessed on the basis of the high-level criteria being met. Those trials with the highest likelihood of success, the largest, potential positive market impact and incurring the least costs and risks to implement should be supported before those with lesser likely outcomes.

(e) If required, what should be the key features of a formal regulatory sandbox arrangement for the NEM? What regulatory arrangements should be within scope to consider for relaxation? What should be the safeguards for consumers? What obligations should be placed on the participants (e.g. knowledge sharing requirements)?

So long as the regulatory sandbox objective is trying to be met, TasNetworks considers that a formal sandbox arrangement should be applicable to any regulatory arrangement in the NEM. The key features of this formal framework might include consideration of:

- what regulatory sandboxes are, what they can be applied to, who is responsible for monitoring and enforcing them and what they are expected to achieve;
- how proponents can go about accessing and applying regulatory sandboxes including application criteria;
- how sandboxes will be assessed and funded;
- what the result of successful trials might allow and how they should be progressed; and
- the obligations on proponents in terms of customer protections, knowledge sharing and confidential information.

In order to safeguard customers, regulatory sandbox arrangements might include the use of risk assessment criteria for screening regulatory sandbox applications, customer consent provisions along with customer engagement and protection principles.

TasNetworks considers the open and transparent sharing of knowledge to be a key benefit of regulatory sandboxes. As above, with the exception of confidential or commercially sensitive information, all trial information and outcomes should be publicised where possible.

QUESTION 8: TRIALLING INNOVATIVE REGULATORY PROCESSES

How could formal regulatory sandbox arrangements be used to trial changes to regulatory arrangements to guide adoption of reforms across the market?

To guide adoption of reforms across the market, TasNetworks suggests that the NEO be relaxed for rules that are the subject of regulatory sandboxes and replaced by the objective above. In this manner, space could be given for the implications of rule changes to be explored and tested without concern for all aspects of the NEO to be met. Ultimately, this would allow for better determination of the best way to implement regulatory change and would be particularly useful in those situations where there is no consensus and/or uncertainty about rule change outcomes. As one example, for deciding between the two options for Stand Alone Power Systems (**SAPS**) service delivery presently under consideration by the AEMC, and for which there is no clear preference as yet established.