

31 January 2019



Mr Owen Pascoe
Director
Australian Energy Market Commission
PO Box A2449
Sydney South NSW 1235

Dear Mr Pascoe

**ERP0068 Regulatory Sandbox Arrangements to Support Proof-of-Concept Trials
– Consultation Paper**

Energy Queensland Limited (Energy Queensland) welcomes the opportunity to provide comment to the Australian Energy Market Commission (AEMC), on its consultation on the *Sandbox Arrangements to Support Proof-of-Concept Trials – Consultation Paper*. This submission is provided by Energy Queensland, on behalf of its related entities Energex Limited (Energex), Ergon Energy Corporation Limited (Ergon Energy), Ergon Energy Queensland Limited (Ergon Energy Retail) and Yurika Pty Ltd (Yurika).

Energy Queensland has addressed the questions raised in the Consultation Paper in the attached submission.

Should you require additional information or wish to discuss any aspect of this submission, please do not hesitate to contact myself or Barbara Neil on (07) 4432 8464.

Yours Sincerely

A handwritten signature in black ink, appearing to read "Trudy Fraser", enclosed in a thin black rectangular border.

Trudy Fraser
Manager Policy and Regulatory Reform

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Encl: Energy Queensland's submission

Energy Queensland Submission on the Regulatory sandbox arrangements to support proof-of-concept trials

Consultation Paper

Energy Queensland Limited
31 January 2019



About Energy Queensland

Energy Queensland Limited (Energy Queensland) is a Queensland Government Owned Corporation that operates a group of businesses providing energy services across Queensland, including:

- Distribution Network Service Providers (DNSPs), Energex Limited (Energex) and Ergon Energy Corporation Limited (Ergon Energy);
- a regional service delivery retailer, Ergon Energy Queensland Pty Ltd (Ergon Energy Retail); and
- affiliated contestable business, Yurika Pty Ltd.

Energy Queensland's purpose is to "safely deliver secure, affordable and sustainable energy solutions with our communities and customers" and is focussed on working across its portfolio of activities to deliver customers lower, more predictable power bills while maintaining a safe and reliable supply and a great customer service experience.

Our distribution businesses, Energex and Ergon Energy, cover 1.7 million km² and supply 37,208 GWh of energy to 2.1 million homes and businesses. Ergon Energy Retail sells electricity to 740,000 customers.

The Energy Queensland Group also includes Yurika, an energy services business creating innovative solutions to deliver customers greater choice and control over their energy needs and access to new solutions and technologies. Yurika is a key pillar to ensure that Energy Queensland is able to meet and adapt to changes and developments in the rapidly evolving energy market.

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1 Introduction

Energy Queensland Limited (Energy Queensland) welcomes the opportunity to provide comment to the Australian Energy Market Commission (AEMC) on its *Regulatory sandbox arrangements to support proof-of-concept trials* Consultation Paper (the Consultation Paper). This submission is provided by Energy Queensland, on behalf of its related entities Energex Limited (Energex), Ergon Energy Corporation Limited (Ergon Energy), Ergon Energy Queensland Limited (Ergon Energy Retail) and Yurika Pty Ltd (Yurika).

Energy Queensland supports the intent of a regulatory sandbox. Specifically we support what a regulatory sandbox seeks to achieve, which is to allow “participants to trial innovative business models, products and services in the market under relaxed regulatory requirements on a time-limited based and with appropriate safeguards in place”¹. We think it is important to allow for innovative solutions to be tested under a relaxed regulatory framework with appropriate conditions, to enable testing of the full spectrum of potential business models, which can be used to support change in the regulatory framework which will ultimately benefit consumers.

Notwithstanding our support for a regulatory sandbox, we do consider it important to highlight that in developing a regulatory sandbox framework, consideration is also given to impacted market participants. For example, where trials impact other market participants’ activities and similar to the approach adopted by the Australian Renewable Energy Agency (ARENA) in respect of their projects, knowledge, insights and data is shared subject to confidentiality provisions.

Responses to the specific questions raised in the Consultation Paper are addressed in the following section. Energy Queensland is available to discuss this submission or provide further detail regarding the issues raised, should the AEMC require.

¹ Refer to section 2.1, page 5 of the Consultation Paper.

2 Table of detailed comments

Consultation Paper Feedback Question	Energy Queensland Comment
1. Other sandbox examples	
Are there other examples of regulatory sandbox arrangements that are relevant when considering these arrangements for the NEM?	Energy Queensland does not have any other examples of regulatory sandbox arrangements that are relevant when considering these arrangements in the National Electricity Market (NEM).
2. Other relevant trials	
What other proof-of-concept trials are relevant when considering formal regulatory sandbox arrangements for the NEM?	<p>Energy Queensland is currently participating in a number of proof-of-concept trials which could be considered under a regulatory sandbox arrangement. Examples include:</p> <ul style="list-style-type: none"> • stand-alone power systems in fringe-of-grid locations; and • the potential for community-scale batteries to provide system, market and localised network services.
3. Barriers to proof-of-concept trials	
(a) Are proof-of-concept trials being inhibited by current market regulations or processes?	<p>Yes. Energy Queensland notes that there is gap in emerging energy storage in the sub 5MW, grid-connected category. This 'community scale' battery storage size located within local networks unlocks the potential of battery storage not only at a market and system level, but also in providing network support to efficiently manage local constraints and enable higher rooftop renewable penetration. However, due to limitations of current market participant categories in the National Electricity Rules, projects such as these cannot test the full spectrum of potential business models in the NEM without a rule change, no action letter or waiver.</p>
(b) If so, what are the potential barriers to proof-of-concept	Energy Queensland recognises there is work currently underway to consider the evolution of market

trials that might be addressed by a regulatory sandbox initiative?

participant categories to cater for the emergence of batteries in the NEM, and has provided input into the AEMO consultation process. However, in the intervening period, proof of concept trials with batteries of this scale face a number of barriers to fully exploring potential business models:

1. The current interim arrangements for utility scale batteries are geared towards batteries greater than 5MW and require registration as both a Market Generator and Market Customer. While it may be possible to apply these arrangements to smaller, sub 5MW batteries, doing so imposes additional registration and operational requirements that may impact the ability to test the full spectrum of potential business models suitable for batteries of this size; and
2. While alternative participant categories that contemplate assets of this size exist, they do not allow for participation in all markets. For example, small generator aggregator (SGA) is an energy-only participant category, and market ancillary services provider (MASP) is designed for load-side only Frequency Control Ancillary Services participation.

As such, Energy Queensland suggest that where existing flexibility provisions, such as waivers and 'no action letters'² do not satisfactorily accommodate proof-of-concept trials, formal regulatory sandbox arrangements should be available to participants. In such circumstances, there should be a clearly defined application and approvals process, and acceptance criteria with other impacted parties consulted where relevant.

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?

Energy Queensland believes there may be a lack of guidance for innovative new entrants on navigating the energy regulatory framework. The segmented supply chain, market operation and rules regulation management results in a number of potential touch points for innovative new entrants. It therefore could be argued that it is difficult for them to find expert advice that covers the technical, legal, regulatory and commercial issues they may face across all the various bodies they may need to deal with without duplication, overlap and circular processes.

² Energy Queensland does not support the provision of "no action letters" by the Australian Energy Regulator (AER) to facilitate proof-of-concept trials in the NEM. Please refer to our responses to question 5 below for more information.

<p>(b) If so:</p> <ul style="list-style-type: none"> • 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? 	<ul style="list-style-type: none"> • Energy Queensland suggests a single stop shop with the requisite broad experience and expertise across all segments (generation, transmission, distribution and retail markets, and disciplines (legal, regulatory, technical and commercial) would be beneficial. • This type of guidance should be provided by a central body but with jurisdictional expertise as well as the above. • Energy Queensland agrees that guidance should be coordinated across market participants including the regulatory bodies, as well as those independent of these bodies. This could possibly be a role within the Australian Competition and Consumer Commission or the Electricity Consumers Association. • Any proposed funding arrangement should be fair and equitable and it would be reasonable for the applicant to pay an application fee for advice. • Yes. The application should require the applicant to provide certain (and potentially detailed) information related to their project to ensure that the relevant market body has the appropriate information to progress any advice. However, for simple enquiries, fact sheets could be developed if requests for advice become repetitive.
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<p>(c) Is there a role for binding advice from market bodies on certain aspects of the regulatory framework to support proof-of-concept trials?</p>	<p>Energy Queensland suggests there should be processes to take advice through various stages of which the ultimate stage may be binding. However, assistance in the preparation of a Rule Change request might be a more preferable end point for advice or alternatively a recommendation for a sandbox.</p>
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5 Trials under AER enforcement discretion

<p>(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?</p>	<p>Generally no action letters and waivers are limited in time and used for when rules are changed or new rules are introduced, and parties identify ahead of the effective date that they will not be able to comply.</p> <p>Energy Queensland does not believe that a 'no action letter' is the right instrument for a light handed application or non-application of the rules in proof-of-concept trials because it will not adequately deal with issues of intellectual property (IP) and commercial confidentiality.</p>
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(b) Is there a need for a more formal process for proponents of proof-of-concept trials to seek a no action letter?	As noted in our response above, Energy Queensland does not consider that 'no action letters' are the appropriate instrument for trials that may be testing IP, products or services that are commercial points of differentiation with competitors.
(c) Should no action letters that facilitate innovation or proof-of-concept trials be made public?	As above, 'no action letters' are not appropriate in this scenario. While a proof-of-concept trial may have an aspect of relief from application of the rules, it will also likely be dealing with IP and commercially valuable processes, products, etc. It is likely that many of the elements of the trial will need to be kept confidential and a 'no action letter' from the regulator is not able to give legal comfort to the owners of the IP.

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?	Yes. Notwithstanding this view, Energy Queensland suggests that formal regulatory sandbox arrangements should be used when alternative approaches have been exhausted. Where trials cannot be accommodated within the existing regulatory framework through a waiver for example, then formal regulatory sandbox arrangements should be applied.
(b) What other regulatory tools are needed to facilitate proof-of-concept trials?	Refer to our response to Q 4(b) above. We do not believe that additional regulatory tools are required with respect to proof-of-concept trials beyond that afforded by appropriate contractual relationships being documented.

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?	Energy Queensland supports this objective. As noted above, it is important to allow proof-of-concept trials to be tested which can then drive regulatory reform where appropriate. We also support the work that non-regulatory bodies are delivering, for example, ARENA.
(b) If required, what metrics should be used to measure the success of a formal regulatory sandbox arrangement?	Energy Queensland believes that a successful outcome of a sandbox is answering the hypotheses being tested – either by confirming or refuting the hypotheses. Conversely, not answering the hypotheses or changing the scope or hypotheses during the trial should be considered as failures. This should be the fundamental measure of all sandboxes. Within a sandbox there are likely different metrics to manage the governance and life of the sandbox

	and for different projects.
(c) If required, what should be the high-level criteria for accessing a regulatory sandbox arrangement?	Energy Queensland suggests that high level criteria should include a clear and precise scope and set of hypotheses to be tested and a clear start and finish date.
(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?	<p>Energy Queensland considers that the IP and commercial issues around bringing innovation into markets is likely to cause contention if the number of trials within a sandbox is limited. We suggest that a simple approach would be to separate sandboxes with only the regulatory bodies being common across every sandbox. In terms of participants in a sandbox, there would need to be a clear separation of interests between the parties. For example, it would be inappropriate to have multiple retailers if the scope is to test how a new retail product drives customer response and may have a material impact on the market framework.</p> <p>Trials for Virtual Power Plants are potential areas where access/ fairness issues could arise. In these cases, it would be important to have an open and transparent process, as well as criteria that guide / determine how a trial is accepted.</p>
(e) If required, what should be the key features of a formal regulatory sandbox arrangement for the NEM?	
<ul style="list-style-type: none"> • 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)? 	<ul style="list-style-type: none"> • We believe that the regulatory framework should be open to testing, given the growing innovation in the energy sector. The NEM frameworks and rules have been designed around the unique features of electricity. Many of these features that made electricity markets unique are now falling away through technological innovation and electrical energy is evolving to a commodity that can be made, stored and distributed via multiple channels and multiple suppliers to multiple users. This challenges the foundation of the NEM market and vertical separation. • Consumers should not be “penalised” as a result of the operation of a sandbox. Similarly, all costs and risks should be borne by the sandbox participants including compensation to any consumers which may be adversely affected. • Energy Queensland suggests that as knowledge sharing is related to the question of IP and commercial intelligence gained from the sandbox, it is a key issue in defining the legal governance arrangements of the sandbox. We believe that the obligations placed on participants should be to add value, not prolong the process. Therefore, there should be clear outcomes and scope.

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?

Energy Queensland suggests that formal regulatory sandbox arrangements may assist by:

- Documenting and building understanding of possible implementation/outcomes;
- Identifying opportunities to amend the regulatory framework; and
- Enabling sharing of experiences and outcomes.