

Tranche two regulations issues paper: Consultation submission form

This form is to be used to provide feedback on a series of questions included in the [Tranche two regulations to support the Electricity Infrastructure Roadmap Issues Paper \(PDF 800KB\)](#) to help inform the development of the regulations.

Please see the [Electricity Infrastructure Roadmap webpage](#) for more information.

Consultation questions

You do not need to answer every question. Please answer the questions of interest to you.

Chapter numbers indicate the location of questions in the Issues Paper.

Please make your submission by **5pm on Friday 21 May**.

Confidentiality and submissions

Providing submissions is entirely voluntary, is not assessable, and does not in any way include, exclude, advance or diminish any entity from any future procurement or competitive process regarding the Electricity Infrastructure Roadmap, or any other NSW programs.

The NSW Government is committed to an open and transparent process, and all submissions will be made publicly available unless the stakeholder advises the Department not to publish all or part of its submission. Authors may elect for some or all of their submission to be kept confidential. If you wish for your submission to remain confidential please clearly state this in your submission.

Your details

Submission type	<input type="checkbox"/> Individual <input checked="" type="checkbox"/> Organisation <input type="checkbox"/> Other Click or tap here to enter text.
Author name	Joel Gilmore
Organisation	Infigen Energy
Author title	Regulatory Affairs Manager
Phone	
Email	
Stakeholder group	<input checked="" type="checkbox"/> Generation or storage infrastructure provider <input type="checkbox"/> Electricity consumer or representative body <input type="checkbox"/> Network infrastructure provider

	<input checked="" type="checkbox"/> Energy retailer <input type="checkbox"/> Government or market institution <input type="checkbox"/> Individual <input type="checkbox"/> Other (please specify)
--	--

Questions

Chapter 4 – Energy Security Target

Question 1:

Should the Energy Security Target Monitor define the method to determine the derating factor or should the method be defined in the regulations? If not by the derating factor, how else should the regulations address the probabilistic nature of semi-scheduled generators in the context of the deterministic Energy Security Target?

Scaling factors and deterministic targets are not consistent with best practice for assessing and delivering reliability in the most affordable way, that best matches consumer preferences¹.

AEMO, in particular, has consistently moved from deterministic targets to probabilistic assessments of reliability and risk (e.g., no longer applying Minimum Reserve Levels, reliability assessed through AEMO's ESOO that uses hundreds of simulations, and short-term reliability risks assessed through AEMO's Forecast Uncertainty Measure, rather than just a simple N-1 or N-2 trigger). Networks are also moving from deterministic to probabilistic planning practises to optimise cost efficiency, utilisation and reliability of their network assets.

Similarly, deterministic firmness factors do not allow for emerging and innovative business models that use broad portfolios of firmness to deliver reliable supply. This is consistent with near-universal feedback from both industry and consumer groups that a capacity market is not fit for purpose for the emerging system.

We suggest instead that:

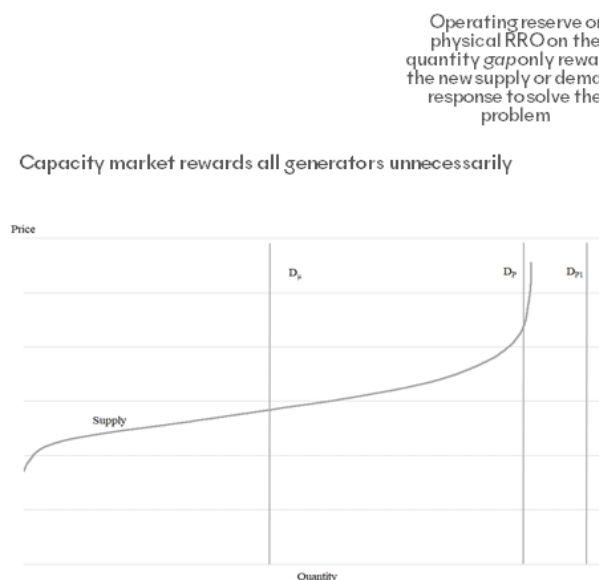
- Reliability is assessed through established processes, including AEMO's ESOO. The appropriate reliability standard should continue to be monitored and reviewed.
- Reliability is further managed through implementing an Operating Reserves framework, which would allow for a standing (but dynamic) reserve to be maintained. This quantity to be procured could be set at N-2 (i.e., the existing FCAS reserves *plus* sufficient reserves to meet N-2 (or FUM, whichever is greater) at all times).
- Critically, this real-time requirement would translate into an investment requirement to maintain sufficient reserves. AEMO's ESOO would identify any shortfalls, and could feed into the Trustee's processes.

Most importantly, this facilitates addressing the actual problem: not all capacity but the capacity gap

Policy should only be implemented to provide incentives for the gap between the additional reliability desired by government and the reliability established through

¹ See for example, https://link.springer.com/chapter/10.1007/978-3-642-04282-9_5

market settings. This is shown diagrammatically in the chart below which shows peak (D_P) and a higher level of government desired demand D_{P1} .



Question 2:

Should the regulations prescribe any other matters for inclusion in the Energy Security Target Monitor's report? If so, what are they?

Chapter 5 – Electricity Infrastructure Investment Safeguard

Question 3:

To what extent are the requirements for carrying out competitive tenders of

The proposed regulations include a requirement “to consider the long-term financial value of the tender participant's offer to consumers”. However, *risk* to consumers should also be factored in when developing or evaluating LTESAs: the greater the derisking of investments, the more risk is transferred to consumers away from developers (who are best placed to reduce and manage the risk).

We suggest that the guidelines should include:

Tranche two regulations issues paper

Consultation submission form



<p>Long Term Energy Service agreements appropriate? Are there any other requirements that should be considered?</p>	<p>“Incentivise offers that demonstrate a path to market for the energy, and reduce reliance on any underwriting through the LTESA”. It is critical that governments focus on the three main shortcomings of Cfds in considering how to implement the LTESA framework.</p> <ul style="list-style-type: none"> • Government-initiated CfD auctions are typically based on simplified metrics such as minimising the levelized cost of energy (LCoE), which can introduce an inefficient pattern of plant entry. “In contrast, broad-based market schemes like the National Energy Guarantee or a well-designed renewable portfolio standard require market participants to focus not on the LCoE, but on the timing, location, and market value of new plant output.” • They introduce quasi-market participants that are almost completely sheltered from the NEM’s energy-only short and medium-run locational, spot and forward price signals. • There is the potential to distort forward markets and market efficiency more generally. This is considered by far the most adverse implication. <p>Furthermore, it will be important to provide flexibility to the Consumer Trustee by allowing the purchase of non-electricity market instruments (e.g. LGCs) that facilitate new generation without resulting in the three poor public policy outcomes noted above and exposing the government to the very significant price risks associated with the NEM (a gross energy-only pool where prices can shift from -\$1,000 to \$15,000/MWh in 5 minute increments). These issues are more fully explored here:</p> <p>https://ideas.repec.org/p/enp/wpaper/eprg1901.html</p> <p>https://econpapers.repec.org/article/eeeecanpo/v_3a69_3ay_3a2021_3ai_3ac_3ap_3a544-556.htm</p> <p>https://theconversation.com/australias-states-are-forging-ahead-with-ambitious-emissions-reductions-imagine-if-they-worked-together-160191</p>
<p>Question 4: Do you agree with the matters the Consumer Trustee must take into account when preparing the Infrastructure Investment Objectives Report? Are</p>	<p>We support the proposed criteria, particularly the consideration of minimising risks and regrets to NSW consumers of over- or under-investment. We recommend the report also consider consistency with state emissions targets and national commitments under the Paris Agreement.</p> <p>There is some risk that the two year gap between reports may not allow for a sufficiently rapid response if market conditions change, including effective utilisation of non-network alternatives (similar risks apply to AEMO’s ISP publication). An annual report, or the ability to update if circumstances warrant, may be valuable.</p>

Tranche two regulations issues paper

Consultation submission form



there any other matters that should be taken into account?	
Question 5: In what circumstances should the Consumer Trustee prefer long duration storage over firming infrastructure to meet the reliability standard?	Delivering 12 GW of new renewable generation by 2030, and then beyond, will require significant storage for an efficient grid. As such, we would recommend that firming technologies should meet the following key criteria: firming must be capable of being adapted to provide long duration energy storage. For example, new gas turbines must be capable of being run using 100% zero emissions alternative fuels (e.g. hydrogen).
Chapter 6 – Classification of REZ network infrastructure	
Question 6: Are there any other considerations that should be taken into account in classifying REZ network infrastructure in regulations, including the need for, and scope of, sub-classifications?	<p>When REZ network infrastructure requires an upgrade to the existing shared network, it may be more appropriate to implement this as an upgrade of the existing network (and implemented through a RIT-T with costs recovered through DUOS). As noted through the AEMC COGATI consultation, distinguishing the incremental access introduced through new non-radial upgrades is challenging, and risks granting firm rights to new generators of an existing network that has been paid for by consumers. It is very challenging to “unscramble the egg” of the NEM’s meshed network.</p> <p>If private investment in new transmission / dedicated connection assets is made inside a REZ, clear frameworks should be developed for how any centralised upgrades would be managed.</p> <p>We also note that where possible the Government should make new network developments contestable, to reduce costs to consumers and drive innovative new solutions.</p>
Question 7: What types of network infrastructure could be subject to economic regulation under Part 5	

Tranche two regulations issues paper

Consultation submission form



of the EII
Act?

Supporting information

If you have additional information you would like to provide to support your views, please provide it here.

If you have additional documents to provide to support your views, please email it with your submission.

Click or tap here to enter text.

Confidentiality and submission publication preferences

Please indicate your publication preferences.

Would you like all or part of your submission to be confidential? If so, please identify the part(s) in your submission	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
For confidential submissions: Some confidential submissions may be shared with the Australian Energy Market Operator, Australian Energy Market Commission, Australian Energy Regulator, the Energy Security Board, TransGrid, the Clean Energy Finance Corporation, Australian Renewable Energy Agency, Essential Energy, Endeavour Energy and/or Ausgrid to better understand and respond to issues raised. Would you like your submission to be kept confidential from these parties?	<input type="checkbox"/> Yes <input type="checkbox"/> No
If your submission is published, only your name and organisation would be published. Would you like your submission to be anonymous and these personal details redacted?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<p>The Department will redact personal details from submissions made by individuals to protect personal information. In the absence of an explicit declaration to the contrary, the Department will assume that information provided by respondents is not considered intellectual property of the respondent.</p> <p>The Department may disclose confidential information provided by you to the following parties:</p> <ul style="list-style-type: none">• The NSW Minister for Energy and Environment or Minister's office• The NSW Ombudsman, Audit Office of NSW or as may be otherwise required for auditing purposes or Parliamentary accountability• Directly relevant departmental staff, consultants and advisors• The Australian Energy Market Operator, Energy Security Board, Australian Energy Market Commission, Australian Energy Regulator, or the Australian Competition & Consumer Commission	

Tranche two regulations issues paper

Consultation submission form



- TransGrid, the Clean Energy Finance Corporation or the Australian Renewable Energy Agency or distribution network service providers
- Other parties where authorised or required by law to be disclosed.

Where the Department discloses this information to any of these parties, it will inform them that the information is strictly confidential.

The Department may publish or reference aggregated findings from the consultation process in an anonymised way that does not disclose confidential information.

We may be required to release the information in your submission in some circumstances, such as under the *Government Information (Public Access) Act 2009*.

Disclaimer: The information contained in this publication is based on knowledge and understanding at the time of writing (April 2021) and may not be accurate, current or complete. The State of New South Wales (including the NSW Department of Planning, Industry and Environment), the author and the publisher take no responsibility, and will accept no liability, for the accuracy, currency, reliability or correctness of any information included in the document (including material provided by third parties). Readers should make their own inquiries and rely on their own advice when making decisions related to material contained in this publication.