

9 June 2021



Dr Kerry Schott AO  
Independent Chair  
Energy Security Board  
COAG Energy Council Secretariat  
John Gorton Building  
King Edward Terrace  
PARKES ACT 2600

Dear Dr Schott

### **Energy Security Board Post 2025 Market Design Options**

Energy Queensland Limited (Energy Queensland) welcomes the opportunity to provide comment to the Energy Security Board (ESB) in response to the *Post 2025 Market Design Options Paper*.

The attached submission is provided by Energy Queensland, on behalf of its related entities, including:

- Distribution network service providers, Energex Limited and Ergon Energy Corporation Limited;
- Regional service delivery retailer, Ergon Energy Queensland Pty Ltd; and
- Affiliated contestable business, Yurika Pty Ltd including its subsidiary, Metering Dynamics Pty Ltd trading as Yurika Metering.

Energy Queensland appreciates the work undertaken to date by the ESB and other market bodies on the future market design for the National Electricity Market. We remain supportive of reforms that are necessary to ensure Australia's energy market is fit-for-purpose and capable of accommodating the rapid increase in new technologies, including grid-scale renewables and distributed energy resources, and meet the changing needs of the electricity system, market participants and customers.

Should you require additional information or wish to discuss any aspect of this submission, please contact me or Charmain Martin on 0438 021 254.

Yours sincerely

A handwritten signature in black ink, appearing to read "Nicola Roscoe", written over a light blue horizontal line.

Nicola Roscoe  
**General Manager Strategy & Regulation**

Telephone: 0429 567 429  
Email: [nicola.roscoe@energyq.com.au](mailto:nicola.roscoe@energyq.com.au)

# Energy Queensland

**Submission to the  
Energy Security Board**

**Options Paper –  
Post 2025 Market Design**

**Energy Queensland Limited**  
9 June 2021



## About Energy Queensland

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

- Distribution Network Service Providers, Energex Limited (Energex) and Ergon Energy Corporation Limited (Ergon Energy Network);
- a regional service delivery retailer, Ergon Energy Queensland Pty Ltd (Ergon Energy Retail); and
- affiliated contestable business, Yurika Pty Ltd (Yurika) and its subsidiaries, which includes Metering Dynamics Pty Ltd trading as Yurika Metering (Yurika Metering).

Energy Queensland's purpose is to 'safely deliver secure, affordable and sustainable energy solutions with our communities and customers' and is focused 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 Network, cover 1.7 million km<sup>2</sup> and supply 35,000GWh of energy to 2.3 million homes and businesses each year.

Ergon Energy Retail sells electricity to 763,000 customers in regional Queensland.

Energy Queensland 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 Metering, which is a part of Yurika, is a registered Metering Coordinator, Metering Provider, Metering Data Provider and Embedded Network Manager. Yurika is a key pillar to ensuring that Energy Queensland is able to meet and adapt to changes and developments in the rapidly evolving energy market.

## Contact details

Energy Queensland Limited  
Trudy Fraser  
Phone: 0467 782 350  
Email: [trudy.fraser@energyq.com.au](mailto:trudy.fraser@energyq.com.au)

PO Box 1090, Townsville QLD 4810  
Level 6, 420 Flinders Street, Townsville QLD 4810  
[www.energyq.com.au](http://www.energyq.com.au)

Energy Queensland Limited ABN 96 612 535 583

© Energy Queensland Limited 2020

This work is copyright. Material contained in this document may be reproduced for personal, in-house or non-commercial use, without formal permission or charge, provided there is due acknowledgement of Energy Queensland Limited as the source. Requests and enquiries concerning reproduction and rights for a purpose other than personal, in-house or non-commercial use, should be addressed to the General Manager Legal Regulation and Pricing, Energy Queensland, PO Box 1090, Townsville QLD 4810.

# Contents

- 1. Introduction .....3
- 2. Detailed comments .....4
  - 2.1 Resource Adequacy and Aging Thermal Generator Retirement..... 4
  - 2.2 Essential System Services, Scheduling and Ahead Mechanisms ..... 6
  - 2.3 The Integration of Distributed Energy Resources and Demand Side Participation... 7
  - 2.4 Transmission and Access ..... 12

# 1. Introduction

On 30 April 2021, the Energy Security Board (ESB) published the *Post 2025 Market Design Options – A paper for consultation, Part A and Part B* (options paper). The options paper follows consideration of potential future market design solutions by the ESB in consultation with other market bodies, i.e. the Australian Energy Market Commission (AEMC), the Australian Energy Market Operator (AEMO) and the Australian Energy Regulator (AER), and industry and consumer stakeholders. It is the final stage in the ESB's consultation process ahead of recommendations being provided to Ministers in mid-2021.

The options paper sets out a pathway for reforms that the ESB considers are required to ensure the energy market framework is fit-for-purpose and capable of managing the challenges and opportunities that arise as a result of the rapid growth in renewable generation entering the system and the changing needs of the Australian electricity market.

The ESB is seeking feedback on a range of immediate, initial and next proposals to deliver reforms in the following areas of focus:

1. Resource adequacy and aging thermal generator retirement;
2. Essential system services, scheduling and ahead mechanisms;
3. Integration of distributed energy resources and demand side participation; and
4. Transmission and access.

The ESB has requested comments on the reform pathways set out in the options paper by 9 June 2021. Energy Queensland's comments are provided in section 2 of this submission.

## 2. Detailed comments

Energy Queensland welcomes the opportunity to provide feedback to the ESB on the proposed Post 2025 Market Design reform options. This submission is provided by Energy Queensland on behalf of its related entities:

- distribution network service providers (DNSPs), Energex and Ergon Energy Network;
- regional service delivery retailer, Ergon Energy Retail; and
- affiliated contestable business, Yurika and its subsidiaries, which includes Metering Dynamics Pty Ltd trading as Yurika Metering.

Energy Queensland's distribution, retail and metering services businesses seek to energise Queensland communities by safely delivering secure, affordable and sustainable energy solutions with our communities and customers.

Energy Queensland remains supportive of any reforms that are necessary to ensure Australia's energy market is fit-for-purpose and capable of accommodating the rapid increase in new technologies, including grid-scale renewables and distributed energy resources (DER), and meet the changing needs of the electricity system, market participants and customers.

Energy Queensland acknowledges that, to date, the ESB has largely focussed on the wholesale and ancillary services markets and engagement with the key stakeholders in those markets, including market bodies, transmission network service providers (TNSPs) and Governments. However, if, as anticipated, DNSPs are to have a more active role in the rapidly evolving high DER future led by customer choice, then Energy Queensland considers that further engagement with DNSPs is required moving forward. We are particularly concerned that issues such as the DNSP's role in management of localised system strength under the evolved framework, changes to end-user connection arrangements and large-scale generation connecting at the distribution network level should not be overlooked.

Energy Queensland provides the following comments on each of the four key focus areas for consideration:

### **2.1 Resource Adequacy and Aging Thermal Generator Retirement**

Energy Queensland is supportive of a common approach to efficiently and cost-effectively facilitating the timely entry of new generation, storage and firming capacity into the system and ensuring an orderly exit of thermal plants as they retire to minimise impacts on the market and risks to reliability of supply.

However, given there is currently sufficient generation capacity in Queensland to meet long-term demand forecasts, Energy Queensland remains of the view that a compelling case has not been made for a requirement to enhance the current Retailer Reliability Obligation (RRO), particularly if the proposed modifications will impose uncommercial obligations, risks and penalties on retailers that are likely to reduce retail competition and drive unfavourable outcomes for customers in the form of price increases.

However, if it is determined that the RRO must be enhanced, Energy Queensland's retailer, Ergon Energy Retail, would prefer Option 2 (a physical RRO with certificates), but with a T-3 trigger. Ergon Energy Retail is supportive of this option as it will allow Queensland customers to avoid paying higher retail prices before it is necessary, and will assist to bring on-line new generation capacity when a reliability gap is identified. By maintaining the T-3 trigger, retailers will have three years to comply with their obligations while generators will have three years to invest in capacity.

With respect to this option, Ergon Energy Retail also supports:

- contract assessment at T;
- the Market Liquidity Obligation being triggered only if the RRO is triggered;
- a clearly defined compliance window; and
- an ex-ante certification process, as this option would lower the cost of certificates, whereas the alternative of verification on the day would result in generators adopting a N-1 approach and fewer certificates which could drive up the cost. Further, the onerous penalty could result in generators being even more risk averse about making certificates available.

However, Ergon Energy Retail considers the current penalty (a portion of the Reliability Emergency Reserve Trader, which could potentially be as high as \$100 million) is disproportionate and onerous, particularly for a compliance assessment after the event. In our view, it is likely that this risk will result in over-compliance (i.e. over-hedging), an inefficient outcome which will lead to increased retail prices for customers.

Ergon Energy Retail also considers that:

- the introduction of a certificate market for capacity will remove the need for an investment signal in the spot price and therefore avoid over-pricing the signal;
- electricity derivative contracts are financial and cash settled and should not be tampered with in the physical RRO; and

- there should not be exemptions for small retailers and commercial and industrial customers due to the risk that small retailers may create new companies to remain below the threshold, and commercial and industrial customers can avoid the RRO obligations by becoming a Market Customer.

Ergon Energy Retail does not support Option 1 (the current RRO, but with no T-3 trigger) as it would result in over-contracting, a greater compliance burden, additional costs for retailers and higher prices for customers. In our view, this option may also impact liquidity, flexibility and innovation and lead to greater market power for dispatchable resources.

## **2.2 Essential System Services, Scheduling and Ahead Mechanisms**

Energy Queensland acknowledges that system services issues are already emerging as a result of the changing generation mix and therefore supports reforms that will maintain secure supply during the transition to a higher penetration of renewable energy. Overall, Energy Queensland is generally supportive of the proposed reform pathway, but provides the following feedback for further consideration.

The reforms currently being progressed by the AEMC propose that shortfalls in system strength and inertia services must be procured by TNSPs through a structured procurement process driven by the Integrated System Plan rather than via an auction process. However, it is noted that in time, inertia (but not system strength) may transition to an auction mechanism. The AEMC's recent *Efficient Management of System Strength on the Power System Draft Rule Determination* also contemplates a payment pass-through arrangement for DNSPs where the generation is close to a TNSP system strength node. As proposed in the draft rule determination, the AEMC believes that joint planning, along with additional provisions for TNSPs, will be sufficient to address system strength issues. However, given the volume of large-scale generation connecting to the sub-transmission networks, Energy Queensland considers that similar provisions should also apply for DNSPs to ensure effective management of system strength issues at the distribution network level.

While we agree with the general approach and the findings of FTI Consulting's report, it is clear that the other international jurisdictions examined are still in the early stages of planning the development of inertia and system strength markets and that they are yet to operate these markets. In Australia, it would appear that we are well ahead of market solutions through the structured procurement approaches being contemplated. Energy Queensland participated in a working group with the AEMC on system strength frameworks and we recognise that the AEMC has included a reference to joint planning as a core input for system strength considerations in distribution networks. However, we remain concerned that this does not go far enough to ensure that the changes to a more distributed energy future are appropriately underpinned by adequate system strength strategically located and appropriately funded by those who benefit most from the service.

A key issue that requires further consideration by the ESB is that the Queensland DNSPs, particularly in regional areas, have a significant amount of large-scale inverter-based resources connected across their networks as well as high levels of small-scale inverter-based resources connected to the low voltage networks. As such, Energy Queensland suggests that the ESB should consider whether DNSPs should also be considered primary providers of system strength. While we note that discussions to date have focussed on the transmission system, thereby reinforcing the historical linear view of a top-down approach, in our view further consideration of system strength at the lower distribution network level is required to effectively facilitate a highly decentralised DER future.

### **2.3 The Integration of Distributed Energy Resources and Demand Side Participation**

Energy Queensland is very aware of the challenges associated with increasing levels of DER and looks forward to further engagement in the development of the transitional reform pathway. We provide the following comments on various matters discussed in the options paper:

#### **2.3.1 The role of the DNSP**

In response to the substantial consumer-driven growth in DER, Energy Queensland's DNSPs, Energex and Ergon Energy Network, are progressing tariff reform, dynamic connection standards and demand management activities to better enable connection of DER without compromising the integrity of the networks. In accordance with *Our Future Grid Roadmap*, Energex and Ergon Energy Network consider that the future of energy is distributed.<sup>1</sup>

Throughout Queensland more than one million customers are utilising load control tariffs.<sup>2</sup> This controllable load gives Energex and Ergon Energy Network the flexibility to manage both maximum and minimum load, by either reducing load during peak times or increasing load during minimum demand times. Energex and Ergon Energy Network generally operate this load control as required by the local network conditions (i.e. dynamic load control), rather than in accordance with a fixed schedule. Customers are rewarded for their continued participation in load control through reduced tariffs. As such, we consider it is critical to ensure that any future framework does not preclude the continuation of current arrangements, noting that this load control is also used to support AEMO's requirements for lack of reserve events.

---

<sup>1</sup> [Future Grid Roadmap](https://www.talkingenergy.com.au/our-future-grid-roadmap) <https://www.talkingenergy.com.au/our-future-grid-roadmap>

<sup>2</sup> [https://www.ergon.com.au/\\_data/assets/pdf\\_file/0017/900710/2021-22-Demand-Management-Plan.pdf](https://www.ergon.com.au/_data/assets/pdf_file/0017/900710/2021-22-Demand-Management-Plan.pdf)

### **2.3.2 Unbundling of DER services**

While Energy Queensland acknowledges the potential for unbundling of services delivered by DER, we are concerned by the complexity of the arrangements proposed. We consider that several hurdles must be cleared before such complex arrangements are contemplated, beginning with a sufficient penetration of devices enabled to participate, as well as clear and significant interest from customers, particularly residential customers, in participating. In our view, a number of energy supply arrangements should be tested before considering complex solutions that address only a segment of engaged customers. In this regard, it is also important that the potential benefits should not to be over-stated.

As part of this transition, Energy Queensland considers that the regulatory regime must be fair and commensurate, providing opportunities for innovation while avoiding the creation of an unlevel playing field that advantages new entrants to the detriment of existing participants. It may be important to contemplate whether the traditional view of energy as an “essential service” still holds with the growth of services that compete with, or are a substitute for, traditional grid-based energy services. This may also need to include consideration of the elements that comprise an “essential service” and how DER fits within this construct when these elements can be traded by the customer.

### **2.3.3 Consumer Risk Assessment Tool**

Energy Queensland acknowledges that consumer protections are an important consideration for the future market. The energy market is inherently complex and customers should have appropriate protections to shield them from the most adverse outcomes. However, these arrangements should be balanced, ensuring that customers retain some responsibility for their actions (and inactions), especially where their actions impact others. In this context, Energy Queensland agrees with the view that the Consumer Risk Assessment Tool should not be intended to remove all risk for consumers, just unreasonable risks. We also note that the assessment of benefits should consider actual, realisable benefits and demand for the service, not just the potential benefits available.

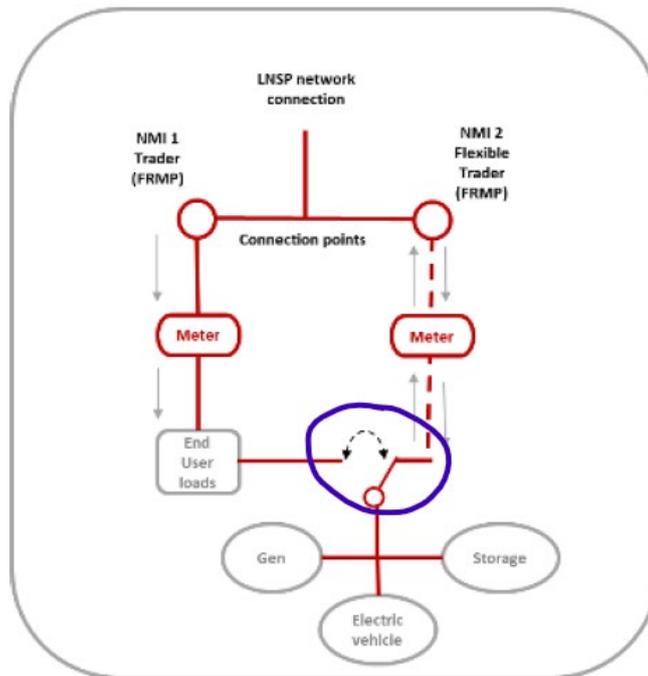
### **2.3.4 Flexible Trading Arrangements**

In relation to enabling flexible trading arrangements at a single site, Energy Queensland has significant concerns about the flexible trader models proposed in Part B of the options paper.<sup>3</sup> These flexible trader models which would enable a customer to switch consumption and DER between connection points (refer to flexible trader model 1 depicted below), is not permitted under Australian Standard

---

<sup>3</sup> ESB, *Post 2025 Market Design Options – A paper for consultation, Part B*, 30 April 2021, pp. 57-59.

3000 *Wiring Rules* 2018 and presents safety risks. For example, a person working on site who believes that they are working isolated could be electrocuted if switching occurs as part of a market or retailer action. Additionally, we note that these arrangements contradict the concept that the DER register is an accurate representation of DER connection, as each DER is allocated to a specific NMI. If this can be switched, AEMO and networks will no longer have visibility of how DER is connected.



In addition to compliance and safety risks, arrangements that allow customers to switch part or all of their load, storage or generation with little or no notice increases the market risk of the primary Financially Responsible Market Participant (FRMP) and requires retailers to factor this risk into their prices. This price premium will likely be recovered from all customers or borne by the primary FRMP, resulting in an inefficient outcome which advantages one party over the other.

Furthermore, arbitrage is usually associated with a lack of information available to a party. This situation is likely to be short-lived as information is discovered. As such, creating opportunities for arbitrage and employing arbitrage as an argument for flexible trading arrangements appears problematic as the arbitrage opportunity would be time-limited.

Energy Queensland further notes the complexity of such an arrangement (in terms of metering, pricing, reconciliation, appropriate sharing of costs, settlement, switching, etc) and questions whether it will deliver the anticipated benefits to individual customers or the system. In particular, we note the need for development of an appropriate methodology to determine cost-sharing which does not disadvantage the primary FRMP and question the suggestion that establishment of a second network connection is undesirable when this is a

legitimate approach under existing arrangements. As long as the network charges are cost-reflective and costs are allocated appropriately, this arrangement would be an efficient outcome.

Energy Queensland also questions the level of uptake that would be required to make the development of such an arrangement worthwhile as well as the level of uptake that could be expected over a specified timeframe. More importantly, it is not yet clear that customers want flexible trading arrangements.

Notwithstanding that these arrangements may only be attractive to a small number of engaged customers, and given the known costs of metering and embedded network management, the costs for enabling such arrangements will be material and should only be borne by the parties directly involved, i.e. the customer and the secondary FRMP. These costs should not be smeared across other system users but should be limited to those who benefit from this arrangement.

While we acknowledge the potential for DER to be used actively by customers and market participants, it is important that the potential benefits to individual customers are not overstated. The development of markets to enable and make use of small customer participation will result in significant additional costs and the “rewards” for customers who participate are likely to be limited. We suggest further analysis is required to demonstrate the expected benefits an individual customer could expect to receive for their participation in such an arrangement.

Notwithstanding the above, Energy Queensland envisages that the operating envelope, broadcast through IEEE 2030.5-2018, *Standard for Smart Energy Profile Application*, could be managed by the DNSP and broadcast directly to the inverter or DER device,<sup>4</sup> and therefore a customer choosing to change retailers or other providers would not affect this relationship. Energy Queensland is also undertaking tariff reform in order to enable as much customer flexibility as possible, while providing price signals to ensure efficient use of the distribution networks. We consider that the DNSP will provide an operating envelope at the connection point visible to the customer or their trader, who would then use this information to inform their participation in the market. Energy Queensland does not envisage that the DNSP would act as a dispatcher.<sup>5</sup>

Finally, Energy Queensland also seeks to understand how local governance of energy could be implemented in a high-DER environment, while locally managing constraints in the network and ensuring reliable access to all customers. In a high DER environment, most of the energy will be generated

---

<sup>4</sup> Refer <https://www.talkingenergy.com.au/dynamicder>.

<sup>5</sup> <https://www.energynetworks.com.au/news/energy-insider/2021-energy-insider/aiming-for-dertopia-not-dystopia/>

and consumed locally. This requires a pragmatic approach that enables such an ecosystem through offering simple and least cost solutions considering the inherent capacity of the network.

### **2.3.5 Tariff Reform**

In relation to the need for continued tariff reform, we note the perpetual challenge for both networks and retailers is how to communicate the tariffs to end-users in such a way that encourages uptake. While network tariff reform to provide cost-reflective price structures is important for incentivising active participation from DER, discussion of more sophisticated tariffs must be considered in the context that customers prefer simplicity. The introduction of more complex price signals is unlikely to be the solution.

### **2.3.6 Scheduled Lite**

Energy Queensland acknowledges the ESB's interest in investigating the potential for some DER owners to play a more active role in the NEM. While interested in the opt-in characteristics of scheduled lite opportunities for smaller connections, Energy Queensland considers it essential that all registered generators are treated in an equitable manner in terms of dispatch. Further, we question whether the scheduled lite concept is adding complexity for little appreciable benefit and whether scheduling of smaller DER is a responsibility more appropriately assigned to an aggregator which is captured by the NEM scheduling arrangements.

We consider that the visibility model would be a low-cost approach and would give market participants and observers a better understanding of the potential interest from DER providers and more structure around the provision of information. However, greater clarity is required as to how this model would deliver actual benefits to the market, to DER operators or to customers.

While the dispatchability model would introduce more useful elements, including indicating the intent of scheduled lite participants, it is a higher cost approach and we question its suitability for small customers. However, we are equally concerned that scheduled lite participants will avoid financial penalties for non-compliance with dispatch instructions. Customers who wish to participate in the NEM need to be appropriately informed and bear some of the risks of participation (e.g. financial penalties) if they are to share in the purported benefits. Otherwise, these risks and associated costs will be borne by existing market participants.

Energy Queensland is concerned that the use of scheduled lite for non-scheduled generators will cause a discrepancy in the market, and suggests that if such a category is introduced, it should only apply to generators and loads exempt from registration (i.e. connecting under Chapter 5A of the National Electricity Rules). The introduction of an opt-in scheduled lite classification

would provide a market-centric option for generators and loads connected to the distribution network under Chapter 5A with an alternative to other dispatch or control schemes that may be more costly, and could potentially strike the right balance between cost and function for these smaller systems. However, it may be advisable for guidance to be provided as to when a generator should be strongly advised to opt-in, such as when system strength or local congestion is a concern.

### **2.3.7 Maturity Plan**

Energy Queensland supports in principle the Maturity Plan approach to developing and progressing reforms that are fit-for-purpose, timely and cost-effective. It is hoped that this approach will allow appropriate consideration of current and emerging technology solutions and mechanisms and tools available under the existing framework to address emerging issues as far as practicable and thereby limit the need for complex solutions and material changes to market and industry systems that will ultimately increase prices for electricity customers.

At the same time, clear governance and appropriate representation is critical to ensuring that Maturity Plan outcomes are well-considered and are of value and capable of being implemented. A key concern for Energy Queensland is that the proposed Maturity Plan process extends well beyond the current remit of the ESB. Therefore, arrangements relating to ongoing enforceability, responsibility and accountability are not clear and must be addressed. In our view, this issue, coupled with the significant investment required by parties who are already engaged in multiple industry consultation processes, may not result in the Maturity Plan process attracting the appropriate level of focus and attention, potentially leading to less than optimal outcomes.

## **2.4 *Transmission and Access***

The ESB has proposed a range of access reform measures intended to drive coordination between transmission, generation and storage at least cost. While Energy Queensland is supportive of this objective, we remain concerned that no consideration appears to have been given to large-scale generation and renewable energy zones (REZs) that are likely to connect to the distribution networks.

A key issue for Queensland is that not all large-scale generation and REZs will connect to Powerlink's network, with many already connected and likely to continue to connect to the distribution networks, particularly in regional Queensland. Energy Queensland therefore remains concerned that, despite feedback being provided in numerous responses to both the ESB's Post 2025 Market Design and the AEMC's

transmission access reform consultation processes,<sup>6</sup> the focus has continued to be confined to connection, access and funding of shared transmission network infrastructure and has not taken into consideration large-scale generation connecting to the distribution networks.

As previously highlighted, the Queensland distribution networks are already responding to generation limitations and other technical constraints. The development of a REZ will not address challenges associated with connecting to the distribution network (including the potential for other generator connections that are in the pipeline, either transmission or distribution, becoming committed and impacting the financial viability of a connection) and upstream congestion or congestion in the distribution network. It is therefore essential that any whole of system access solution should include consideration of large-scale generation connecting to distribution networks, i.e. a consistent approach across both transmission and distribution.

As there are a number of drivers for generators to connect in a particular location other than access to the transmission network (such as adjacent load and access to large areas of low-priced land and energy sources), any reforms must consider large-scale generation connected to the distribution network to ensure that market choice is maintained. However, to date, reforms have largely overlooked distribution-connected large-scale generators, as well as the interaction between small-scale DER, and the effect on power flows at the transmission level. Pricing reforms must also consider potential cases such as storage (with both generation and load characteristics) which is currently treated differently in terms of transmission and distribution tariffs and which is unlikely to be the most efficient outcome for the power system. It should also be noted that penetration of DER impacts on all Post 2025 Market Design reforms, both directly and indirectly.

---

<sup>6</sup> Energy Queensland, *Submission on the Transparency of New Projects Consultation Paper*, May 2019; Energy Queensland, *Submission to the AEMC: Coordination of Generation and Transmission Investment Implementation – access and charging*, April 2019; Energy Queensland, *Submission to the AEMC: Coordination of generation and transmission investment – access reform*, August 2019; Energy Queensland, *Submission to the ESB: Post 2025 Market Design*, 30 September 2019; Energy Queensland, *Submission to the AEMC: Coordination of generation and transmission infrastructure proposed access model*, November 2019; Energy Queensland: *Submission to AEMC: Renewable Energy Zones*, November, 2019; Energy Queensland, *Submission to AEMC: Investigation into System Strength Frameworks in the NEM*, May 2020, Energy Queensland, *Submission to the AEMC: Transmission Access Reform: Updated Technical Specifications and Cost-Benefit Analysis Interim Report*, 19 October 2020; Energy Queensland, *Submission to the ESB, Post 2025 Market Design Consultation Paper*, 19 October 2020.