11 February 2021

Ms Anna Collyer
Chair
Australian Energy Market Commission
GPO Box 2603
SYDNEY NSW 2000

Dear Ms Collyer

Consultation Paper: Review of the Regulatory Framework for Metering Services (EMO0040)

Energy Queensland Limited (Energy Queensland) welcomes the opportunity to provide comment to the Australian Energy Market Commission in response to the *Review of the Regulatory Framework for Metering Services* consultation 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
- Contestable metering business, Yurika Metering (registered as Metering Coordinator and accredited to provide Metering Provider and Metering Data Provider services to business and residential customers in the National Electricity Market).

Should you require additional information or wish to discuss any aspect of this submission, please do not hesitate to contact me or Charmain Martin on 0438 021 254.

Yours sincerely

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Energy Queensland

Submission to the Australian Energy Market Commission

Consultation Paper – Review of the Regulatory Framework for Metering Services

Energy Queensland Limited

11 February 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^2 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.

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1 Introduction

On 3 December 2020, the Australian Energy Market Commission (AEMC) published the *Review of the regulatory framework for metering services* consultation paper (consultation paper). The consultation paper follows the AEMC's final determination on the *Expanding competition in metering and related services* rule (*Competition in metering)* which introduced a new competitive framework for metering services that commenced operation on 1 December 2017. The *Competition in metering* final determination recommended that certain aspects of the rule be reviewed three years after commencement.

The AEMC's review is broader than the issues identified for review in the final rule determination in 2015, i.e. the ability of small customers to appoint their own Metering Coordinator (MC) and whether some form of access regulation of metering services and meter data is required, but will also focus on whether the new framework meets expectations or requires changes to improve its efficiency and effectiveness. Matters covered by the review include:

- the current state of the rollout of smart meters in the National Electricity Market (NEM) (excluding Victoria), including an assessment of whether expected benefits are being realised and if there are barriers to the rollout or use of smart meters;
- the future requirements for metering services, including future services smart meters may deliver, the impact of other market reforms on the metering framework and the role of smart meters into the future; and
- the appropriateness of the current market structure.

The AEMC has requested feedback on the issues raised in the consultation paper in order to develop a report to the National Federation Reform Council that may recommend changes to the National Electricity Rules (NER), the National Energy Retail Rules (NERR) and other regulatory instruments, as well as other recommended actions.

The AEMC is seeking feedback on the regulatory framework for metering services by 11 February 2021. Energy Queensland's comments are provided in sections 2 and 3 of this submission.

2 General comments

Energy Queensland welcomes the opportunity to provide feedback in response to the AEMC's consultation on the regulatory framework for metering services. This submission is provided by Energy Queensland on behalf of its related entities:

- distribution network service providers, Energex and Ergon Energy Network;
- regional service delivery retailer, Ergon Energy Retail; and
- contestable metering business, Yurika Metering (registered as a MC and accredited to provide Metering Provider (MP) and Metering Data Provider (MDP) services to business and residential customers in the NEM).

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.

Smart meters have been identified as a key technology for the electricity sector transformation and a key enabler of the long-term economic benefits of digitalisation. Energy Queensland acknowledges the potential of this technology and is strongly supportive of the AEMC's review of the metering framework to ensure it is fit-for-purpose and effectively facilitates the realisation of the potential benefits enabled by smart meters that will lead to positive customer outcomes.

Energy Queensland acknowledges that in the three years since the introduction of the *Competition in metering* reforms in December 2017, the potential benefits that can be derived by customers from the services provided by smart meters has not yet materialised, nor has there been significant customer interest in smart meters or their ability to facilitate energy consumption management. Similarly, the full range of potential benefits of smart meters has not been realised by participants within the electricity sector (such as retailers, networks and generators). We also acknowledge that some stakeholders may consider that the pace of smart metering deployment to date has not been appropriate.

However, given the current metering framework has only applied for three years, we consider that it is unreasonable to expect smart meter deployment to have occurred at a significantly faster rate or for the full range of potential benefits to be realised by participants and customers. We note that the AEMC developed a framework for a *market-led* deployment of smart metering as it was considered more likely to result in a more economically efficient outcome. While we understand that some stakeholders are keen for deployment to be accelerated to enable the realisation of benefits, the rate of deployment reflects what the market has realistically been able to deliver to date. In this regard, it should be recognised that the *Competition in metering* reforms were a significant change for the sector, requiring substantial financial investment by market participants to implement and, as such, expectations regarding the pace of deployment and realisation of benefits should be moderated.

Further, we note that the range of potential *economic* benefits which may arise from the widespread deployment of smart meters are expected to accrue in the longer-term once:

- a critical mass of smart meters has been deployed;
- participants have adapted their businesses and systems to make use of the additional data and services to develop products for customers; and
- customers have become sufficiently engaged to make use of the available data and services.

These issues were acknowledged by the AEMC in its final determination for the *Competition in metering* reforms. In the meantime, market participants (mainly retailers) are incurring significant *financial* costs which exceed the value of any *financial* benefits available to them in the short-term. While this is likely a natural consequence of reforms designed to deliver *economic* benefits in the longer-term, the framework also creates a classic split incentive scenario where benefits accrue to parties who do not share in the costs.

As noted above, Energy Queensland understands that the value to be derived from smart meters will increase over time as installation rates grow, technology evolves, cost-reflective tariff reform strategies progress and customers' interest in smart platforms develops. However, in the short-term, large-scale market-led deployment of smart meters is inhibited by:

- the costs to install, operate and maintain smart meters and inability to take advantage of economies of scale;
- a complicated market structure that necessitates negotiation and coordination by multiple parties with differing financial and operational interests;
- the large number of legacy accumulation meters that remain functional and capable of meeting customer needs and the capital contribution charge payable by the retailer to the DNSP when replaced by a smart meter;
- physical barriers to smart meter installation (including, in some instances, the need for customers to upgrade their existing switchboard at considerable cost);
- regulatory and legislative barriers that limit the range of realisable benefits, including the rate at which tariff reform can be progressed within the current regulatory framework;
- a lack of significant customer interest in smart meters and complementary products and services enabled by them; and
- emergence of new technologies (such as smart inverters) that may potentially provide data at lower cost, rendering part of this service from smart meters obsolete.

Energy Queensland considers that, without other drivers, smart meter rollouts will mostly be limited to new and replacement metering installations for the foreseeable future unless significant improvements to the framework are made to maximise benefits to all participants and customers.

We also note that the *Competition in metering* reforms were intended to increase competition and remove impediments in the existing arrangements that restricted competition in the provision of metering services for small customers and reduced incentives to innovate and invest. However, in our view, the suggested theoretical benefits of competition have not yet eventuated for the benefit of customers. Further, given that metering is a high volume, low margin business and the NEM is a relatively small market in global terms with a significant geographic spread, we are concerned about the sustainability of multiple metering businesses in the competitive market. With the significant investment in information technology infrastructure required to manage a metering business, it is unlikely that the market will support a large number of participants. Evidence would suggest that market consolidation (and therefore the concentration of market power in a few providers) is already occurring.

Due to the current state of metering in the NEM and the fact that there has been significant investment by participants to operate in the competitive market, Energy Queensland supports focussing on the removal of barriers to the realisation of benefits and changes to the current framework that, in our view, enable efficiencies to support further deployment of smart meters and the delivery of smart meter services to customers. To facilitate more positive outcomes in the long-term interests of customers and the market transition to a renewable energy future, Energy Queensland considers that the metering framework should:

1. enable the full range of potential customer, retailer, network and other benefits that can be provided by smart meters to be realised;

2. provide market participants, such as network service providers, with more certainty of access to metering services and data that will support the efficient operation of the grid and lead to lower electricity prices for customers in the long-term;

3. support sustainable business models for metering businesses in the competitive market, recognising that the market has monopoly characteristics and that consolidation could lead to reduced competition; and

4. reduce complexity and support efficient and cost-effective installation of smart meters.

To achieve these outcomes, Energy Queensland is of the view that action is required to:

- remove existing regulatory barriers to realising the benefits of smart meter services, such as remote disconnection / reconnection;

- expand the minimum services specification to ensure that it provides a sufficiently broad range of services and data to achieve maximum benefits from smart meters, such as engineering data to identify broken neutrals, and monitor power quality and network performance, and introduce appropriate mechanisms (e.g. access regulation) to ensure that smart meter data:

  - can be accessed on fair and reasonable terms and at a cost that reflects the reasonable cost to the MC of providing the service; and

  - can continue to be accessed following retailer or MC churn,

while retaining the ability for distribution network service providers (DNSPs) to install network devices at customers' premises that allow them to monitor, operate or control their networks for the purpose of providing network services as appropriate to securely, safely and efficiently deliver network services;

- implement a consistent, NEM-wide approach to collection, storage, access and use of asset and engineering data, with appropriate privacy and security protections and integrated information systems;

- initiate a program to educate customers on both the direct and in-direct benefits of smart meters as well as other complementary mechanisms (e.g. time-of-use tariffs) and technologies (e.g. in-home devices) that will enable them to extract greater value from their meter; and

- continue to investigate opportunities to improve the smart meter installation process to provide a better customer experience and create efficiencies, for example by:

  - standardising installation processes to ensure consistency and efficiency;

  - developing a solution for shared fusing arrangements that minimises customer inconvenience; and

  - simplifying the customer opt-out process by removing the requirement for a retailer to provide a second notice when proposing to undertake a new meter deployment.

  However, Energy Queensland notes that opportunities to improve smart meter installation processes will be limited under the current market structure given the need for multiple parties to coordinate and ring-fencing arrangements that prevent DNSPs from installing meters.

Further, given the AEMC has decided on a more holistic review of the metering framework, we also suggest that the review consider the potential for changes to the broader regulatory framework which can complement smart meters. For example:

- current billing rules hinder the take-up of electronic billing and monthly billing by customers and the requirement for the retailer to obtain explicit informed consent for these options prolongs calls to customer service centres;

- the vast majority of customers with smart meters remain on flat tariffs, despite the advantages that alternative tariffs can offer many customers; and

- planned interruption notices for the installation of smart meters may not be delivered by SMS.

We therefore suggest that the AEMC consider more progressive options to accelerate the uptake of these products to bring forward the realisation of the benefits to customers, retailers and networks.

Energy Queensland's detailed comments on the questions posed in the consultation paper are provided in section 3 of this submission. We are available to discuss this submission or provide further detail regarding the issues raised.

3 Specific comments

Energy Queensland provides the following feedback on the questions posed in the consultation paper for consideration:

CHAPTER 1 – INTRODUCTION

• **Consideration of other market reforms and related work**	
1.1 Are there other significant market reforms that are likely to impact the metering framework that the Commission has not identified?	Energy Queensland agrees with the AEMC's assessment that smart meters will play a key role in the Energy Security Board's Post-2025 market design initiatives and data strategy. In addition, the five-minute and global settlements and, to a lesser extent, the wholesale demand response mechanism, also have linkages with the metering framework. While we do not expect these reforms to significantly impact the pace of deployment of smart meters, we note that the implementation of five-minute settlement, for instance, will increase the volume of metering data that will need to be collected, stored and shared. In addition to these reforms, Energy Queensland considers that the AEMC's review should take a broader view of the metering market and other mechanisms that may be inhibiting positive customer outcomes, including jurisdictional legislation and the Australian Energy Regulator's *Ring-Fencing Guideline*.
1.2 Is there additional related work that the Commission should consider in this metering review?	Energy Queensland is not currently aware of any additional related work that should be considered as part of this review.
• **Assessment framework**	
2. Do you agree with the Commission's proposed Assessment Framework for this review? Are there any additional criteria we should consider as a part of this framework?	Energy Queensland is generally supportive of the AEMC's proposed assessment framework for this review. We agree that the metering framework should be efficient and cost-effective to facilitate positive customer outcomes with respect to price, quality, safety and security of supply of electricity. In this regard, the AEMC should bear in mind that the current metering framework has only been in existence for three years, while the National Electricity Objective and National Energy Retail Objective consider initiatives in the context of the 'long-term interests of consumers of electricity'. Energy Queensland would

	therefore support a further review of the metering framework in three years to determine if the longer-term needs of customers are likely to be met.

CHAPTER 3 – THE CURRENT STATE OF METERING

• **Expectations of meter rollout**	
3.1 How does the roll out of smart meters to date compare with your expectations?	Energy Queensland notes that the primary drivers for smart meter uptake to date have been customer-requested electrical works (primarily related to solar PV installations), new connections and faulty meter replacements.[1] This outcome is not unexpected given the requirement for all new and replacement meters to be smart meters. Comparatively, there has been a lower overall volume of retailer-led deployment of smart meters. This outcome is also largely in line with expectations, as the *Competition in metering* reforms were not intended to result in widespread deployment of smart meters initially, but rather it was intended that deployment would be driven by customers gradually taking up new products and services over time.[2] It was therefore recognised at the time the metering reforms were implemented that a market-led approach would not result in the rapid deployment of smart meters, but would likely result in a more economically efficient outcome in the long-term. However, given the issues with the current metering framework outlined in this submission, we acknowledge that deployment has likely been slower than some stakeholders may have expected. At the commencement of the *Competition in metering* reforms, Ergon Energy Retail envisaged that up to 171,000 new smart meters could be deployed across regional Queensland by December 2020. However, this estimate was prepared at a time when the regulatory framework for metering charges (including price) was not clear. As at 31 December 2020, Ergon Energy Retail had deployed approximately 165,000 smart meters.

[1] AEMC, *Consultation Paper: Review of the Regulatory Framework for Metering Services, 3 December 2020*, p. 21.
[2] AEMC, *Rule Determination: National Electricity Amendment (Expanding competition in metering and related services) Rule 2015, National Energy Retail Amendment (Expanding competition in metering and related services) Rule 2015*, 26 November 2015, p. 36.

3.2 Is the current pace of smart meter deployment appropriate? What should be the appropriate pace of rollout?	Despite the potential range of benefits that a greater penetration of smart meters offers, Energy Queensland considers that the current pace of deployment is appropriate under the existing framework, particularly considering the known barriers to maximising potential benefits, installation and coordination issues, and lack of customer uptake of supporting technologies, products and services. As metering businesses like Yurika Metering have resource limitations and financial constraints that impact the pace at which smart meters can be deployed, it would be challenging for the market to significantly accelerate the process. A more rapid rollout program would require a planned and coordinated approach to ensure that smart meters can be installed efficiently and cost-effectively and within participants' resource and financial constraints. Any consideration of increasing the pace of smart meter rollout should be subject to a cost-benefit analysis. Ergon Energy Retail is working towards a planned deployment target for smart meters across its customer base in regional Queensland. However, under the existing framework, the most efficient approach is primarily compliance-based. This approach could potentially be reconsidered if the costs of installing smart meters was offset by savings in service costs, such as through providing remote disconnection / reconnection services.
3.3 What benefits are smart meters providing consumers? Have the benefits changed or improved over time?	In our view, smart meters are not currently providing most of the potential benefits to customers and this situation is not expected to change until a critical mass is achieved. While we recognise that a minority of engaged customers may be taking advantage of some billing-related benefits that a smart meter offers, Ergon Energy Retail's analysis of available data has revealed that most customers are not currently benefitting from having a smart meter installed. For instance, Ergon Energy Retail has noted that: • customers' electricity usage has not typically reduced following installation of a smart meter; and • most customers with smart meters have remained on flat tariffs despite the tariff options available to them when a smart meter has been installed. However, this may indicate a need for greater customer education with respect to energy literacy. While we acknowledge that there is potential for improved outcomes and benefits for customers that are not currently being realised, they will largely be dependent on improvements to the current framework and changes in customer behaviour.

3.4 Have the prices for smart meters plus the costs of associated products and services changed from the introduction of *Competition in metering?* If so, how?	Since the introduction of *Competition in metering*, Yurika Metering has noted that the price of smart meters has declined by approximately 10 per cent as a result of market competition. As economies of scale and fleet sizes increase, the fixed cost per unit is expected to continue to reduce. However, while there has been downward pressure on smart meter prices, the actual cost to provide metering services has increased. Factors contributing to the increased costs to provide metering and associated services include the following: • managing Type 4A installations (including undertaking quarterly meter reads); • managing coordination and access issues and the need for customer switchboard upgrades; • keeping information systems up to date with changing technology; • managing differences in jurisdictional regulatory arrangements, including different requirements that impact the skills, equipment and processes required for metering field service provision; and • complying with ongoing regulatory change, e.g. meter installation timeframes, five-minute settlement and MC planned interruptions. These additional costs are either being passed through to the customer in increased metering charges or absorbed by market participants.
• **Are incentives in the right place?**	
4.1 Are the incentives in relation to smart meter rollout correct? Please provide details on why/why not.	There are currently limited incentives for a market-led rollout of smart meters. Key reasons include: • a market structure that has resulted in a split incentive scenario where the benefits of smart meter deployment accrues to parties who do not share in the costs; • inability to provide the full range of smart meter services, including remote disconnection and reconnection; • inability to realise the full potential benefits of smart meters without high penetrations of smart meters and integrated data systems; • difficulties for networks to negotiate consistent, secure and cost-effective access to asset and engineering data that will lead to network efficiencies and cost-savings;

	• uncertainty regarding ownership of asset and engineering data; • increased costs to provide smart meter services due to factors outlined in answer to Q. 3.4 above; • high costs to set up information systems to support high volumes of smart metering data which is sourced by multiple providers and provided in multiple formats; • physical barriers to installing smart meters, including onerous opt-out provisions, shared fusing in multi-tenancy premises, access difficulties, the need for existing customer switchboards to be upgraded and coordination issues between multiple parties; • lack of customer understanding of and interest in adopting new technologies, products and services; and • limited interest in taking up cost-reflective pricing by customers. Further, given the nature of the retail market in regional Queensland and the barriers to achieving the full benefits of smart meters, any incentives to roll out smart meters in that area of the State are limited.
4.2 Is the current market structure financially viable? If not, for whom is it not financially viable?	Under the current model, retailers and metering service providers attract most of the costs associated with installing smart meters and providing metering data. As already noted, there is significant unrealised potential for other parties, for example DNSPs, to access metering services and data and thereby contribute towards the costs. The costs to serve for Type 4A metering installations are also unsustainable for metering businesses due to expenses associated with quarterly manual meter reading requirements, particularly in regional and remote areas.
• **Drivers of smart meter roll out**	
5.1 What were your expectations regarding the drivers of smart meter rollouts?	In line with the AEMC's final determination, Energy Queensland's initial expectations were that smart meters would be rolled out primarily in new and replacement situations and as a result of retailers offering new products and services to customers. It was also expected that the volume of retailer-led deployments would steadily increase over time and ultimately overtake customer-driven installations. However, as already noted, retailer-led smart meter rollouts have been relatively minimal to date.

5.2 Has there been any changes in the overall reasons for installing smart meters since the *Competition in metering* rule commenced?	The key drivers of smart meter rollouts continue to be new connections, customer-requested electrical works (primarily for solar PV) and faulty meter replacements. While the key drivers have not changed significantly over time, smart meter installations due to failed meter families is increasing as the DNSPs complete their meter testing programs.
5.3 Which parties should be responsible for driving the roll out of smart meters?	Given the significant investment by participants in assets, systems and resources to participate in the competitive metering market, Energy Queensland suggests that the parties currently responsible for meter deployments remains appropriate. In Energy Queensland's view, changing responsibilities or placing further expectations on participants to accelerate deployment of smart meters should not be contemplated until all known issues and barriers to realising potential benefits have first been resolved. As noted above, a more rapid rollout program by participants would require a planned and coordinated approach to ensure that smart meters can be installed efficiently and cost-effectively and within participants' resource and financial constraints. Any consideration of changing responsibilities or increasing the pace of smart meter rollout should also be subject to a cost-benefit analysis.
5.4 Do consumers have clear information on the benefits of smart meters and their rights relating to requesting a smart meter?	Despite the availability of information on smart meters, Energy Queensland understands that most small customers are unaware of and / or uninterested in the type of electricity meter installed at their premises or the potential benefits a smart meter can deliver. As already noted, most customer-driven installations are associated with new connections or customer-requested electrical works that require an existing meter to be replaced by a smart meter (primarily for solar PV). It is unlikely that a customer will specifically request a smart meter, but rather a new product or service that requires a smart meter (e.g. time-of-use tariff or smart device) will drive the upgrade. We therefore consider that further measures are required to educate customers on both the direct and in-direct benefits of smart meters and that marketing of complementary mechanisms (e.g. time-of-use tariffs) and technologies (e.g. in-home devices) is required to enable customers to extract greater value from their meter. However, until new and innovative products and services become more widely available and the known barriers to realising the full benefits of smart meters are addressed, it is, in our view, difficult to justify funding additional customer education to create further customer demand for smart meters at this time.

• **Customer experience**	
6. Customer experience – what are your views on the customer experience in relation to smart meter rollout and installation?	It is Energy Queensland's understanding that customers do not always have a positive experience with respect to smart meter rollout and installation. Given the need for multiple parties to be involved in the rollout and installation process, complications and customer dissatisfaction can arise with respect to: • scheduling and coordinating appointments for new connections within meter installation timeframes, particularly as ring-fencing arrangements prevent DNSPs from installing smart meters; • obtaining final reads from replaced Type 6 meters; • the need for some customers to upgrade their existing switchboard; and • effecting multiple planned outages to multiple customers in large multi-tenancy complexes.[3] Our industry partners, i.e. electrical contractors and builders, have expressed concerns about the need to liaise with multiple parties for the installation of metering assets, noting that in the past DNSPs typically provided a bundled service that included installation of the meter for new connections. Complaints are also being received from customers experiencing a high number of planned interruptions for metering work in large, multi-occupancy premises. For instance, one customer recently experienced five planned interruptions within a four week period for metering installation works for other occupants due to shared fusing arrangements. Energy Queensland's businesses continue to investigate opportunities to improve the customer experience. However, because of the need to coordinate with multiple parties and meet tight installation timeframes, they are limited in their ability to resolve these issues.

[3] In South East Queensland, Energex has noted a 200 per cent increase in distributor planned interruptions since the introduction of the MC planned interruption rule change.

• **Industry Cooperation**	
7.1 Do you have any suggestions on how industry cooperation can be improved?	The *Competition in metering* reforms increased the number of stakeholders in metering as well as the complexity of the framework for the installation of meters and provision of metering services. Over the past three years, participants have used best endeavours to work together to resolve coordination challenges and inefficiencies that did not previously exist to improve the customer experience. Energy Queensland supports ongoing collaboration by industry participants, i.e. metering service providers, DNSPs and retailers, in continuing to identify and implement improvements to smart meter rollout and installation processes. The facilitation of targeted working groups to streamline and standardise processes may be of benefit. However, participants will be limited in their ability to achieve improved outcomes due to ring-fencing, jurisdictional safety and technical requirements, installation timeframes and other regulatory compliance issues.
7.2 Are changes to the market structure or roles and responsibilities needed to improve the consumer experience?	Given that businesses have made substantial investments to participate in the competitive market, and taking into consideration the range of known issues with the current framework, Energy Queensland is of the view that any significant changes to the market structure and participant responsibilities should not be contemplated at this time. Rather, the focus of this review should be on removing barriers to achieving the full range of potential smart meter benefits and identifying measures to improve smart meter installation processes. However, in the interests of improving customer outcomes, we are of the view that consideration should be given to allowing contestable MCs to perform the MC role for transmission connection points to reduce the timing and complexities in completing metering works.
• **Expectations of metering services**	
8.1 What expectations did you have around the services that smart meters would provide?	Energy Queensland anticipated that the *Competition in metering* reforms would enable a range of services that would benefit multiple stakeholders, including: • the ability for customers to: – access more accurate and detailed data on their energy usage to better manage their consumption and reduce electricity bills;

	– benefit from more frequent electricity bills; and – switch retailers more quickly; • the ability for retailers to: – provide a higher level of service to customers and offer new products and services, including time-of-use tariffs and behind the meter services, such as load control; and – reduce their debt management and electricity theft costs; • the ability for DNSPs to access engineering data to better manage and plan their networks, improve safety, progress cost-reflective network tariffs and lower network costs; and • the capability for retailers / MCs to utilise remote functionality to disconnect and reconnect premises and undertake meter readings (resulting in avoided meter reading and disconnection and reconnection service costs for DNSPs and reduced customer complaints related to estimated meter readings). As noted above, given the current metering framework has only applied for three years, smart meter deployment has yet to reach a critical mass to enable many of the potential benefits to be realised, including the above-mentioned services. However, we acknowledge the potential for these and many other services to be provided with greater deployment of smart metering, greater engagement from customers and more product innovation.
8.2 What services are being provided by smart meters currently? Are these services widely available?	Most services currently being provided by smart meters are related to customer billing and information. Ergon Energy Retail's customer data portal Energy Analysis is available to all business customers regardless of whether their premise has smart or basic metering. However, more functionality is available in the portal for customers with smart metering than those with basic metering (e.g. tariff comparisons including time-of-use tariffs). At this stage, our customer data portal is only available to residential customers with smart metering.
8.3 What services did you expect from smart meters which have not eventuated?	During consultation on the *Competition in metering* rule change, DNSPs expressed concern about their ability to access engineering data to provide operational efficiencies and lower network costs. As expected, network benefits have not eventuated and DNSPs continue to have concerns about the ability to access engineering data from meters provided by third parties.

	Ergon Energy Retail is aware that remote disconnection and reconnection services are in use in other Australian jurisdictions, but are effectively prohibited in Queensland by section 220 of the Electrical Safety Regulation 2013 (Qld) which only authorises distribution entities to reconnect an electrical installation thereby restricting remote reconnections and effectively making it inefficient to perform remote disconnections.
8.4 Are there any services being provided by smart meters which were not anticipated at the time of the *Competition in metering* rule change?	Energy Queensland is not aware of any unanticipated services being provided by smart meters.

CHAPTER 4 – THE FUTURE STATE OF METERING

• **Collection and use of metering data**	
9.1 In relation to metering data, what data should be captured by smart meters, and why?	Energy Queensland considers that energy usage and engineering data should be captured to enable: • customers to better monitor and manage their energy usage; • retailers to provide innovative tariff products and services; and • DNSPs to more efficiently and safely manage and plan their networks and facilitate integration of distributed energy resources and renewable energy.
9.2 In relation to metering data, who should be able to access metering data, and how? What protections should be in place?	In Energy Queensland's view, customers should have access to data to assist them in understanding and managing their energy usage, and all relevant smart metering data should be accessible by authorised parties who require it for operational purposes. For example, DNSPs should be able to access engineering data applicable to their network. To enable recovery of the costs of providing smart meter services and data, ongoing access to smart metering data by authorised parties should be provided on fair and reasonable terms and at a cost that reflects the reasonable cost to the MC of providing the service. There is currently uncertainty as to whether engineering and asset data (particularly if it identifies the associated National

	Metering Identifier) is personal information for the purposes of the *Privacy Act* 1988 (Cth). In our view, a common-sense approach would suggest that secure sharing of this type of data should be permitted without customer consent if it assists with managing the network and reducing costs to connected customers. However, further clarity on this issue would be welcomed.
9.3 What impact do you think the Consumer Data Rights may have on the access to, and use of, metering data?	Energy Queensland notes that the draft Consumer Data Right rules for the energy sector are yet to be published. However, we expect that access to metering data will be managed appropriately and will only be provided to parties authorised to receive it. It is likely that there will be more demand for customer metering data from third parties for the purposes of better understanding customers' energy usage patterns.
• **Future metering services**	
10.1 What is your understanding of the other services that smart meters can provide?	It is anticipated that as technology develops and customer interest in complementary mechanisms and technologies increases, smart meters will be able to provide a range of services. The services that can be provided by smart metering have been well-documented and include the ability to provide access to remote services (including meter reading, reconnection and disconnection), engineering and asset data for network management and planning purposes and the ability for retailers to offer new energy products and services, including load control and solar optimisation.
10.2 What future services do you expect or want metering to facilitate?	As above.
10.3 If additional services are to be provided by smart meters, how should the costs of providing these services be allocated?	Energy Queensland considers that the parties benefitting from the service should contribute towards the costs of providing the service. For instance, some form of access regulation may be required to ensure that parties, such as DNSPs, have ongoing certainty of access to engineering and asset data on fair and reasonable terms and at a cost that reflects the reasonable cost to the MC of providing the service.

• **Penetration of smart meters required**	
11.1 Are particular metering services only cost effective when a particular penetration is achieved? If so, what services and what penetration is required?	Due to the low price point required by retailers for smart metering, a high penetration of meters is necessary to effectively smear the fixed costs across a large customer base. Economies of scale are a fundamental component of being a profitable MC or MP. We note that in 2019, the Queensland Competition Authority assumed that at least 60 per cent penetration is required to achieve benefits from smart metering.[4]
11.2 What other factors are important in determining whether the provision of particular services are efficient or effective (e.g. geographic spread).	Geographic spread, location and reliable communications are also critical factors to achieving the full potential benefits of smart meters efficiently and cost-effectively. For instance: • smart meters have the potential to result in significant savings in regional Queensland where network and meter reading costs are higher due to greater geographic spread; and • availability of reliable communications greatly impacts the effectiveness of remote metering services in rural and remote areas.

CHAPTER 5 – ARE CHANGES REQUIRED TO THE REGULATORY FRAMEWORK?

• **Encouraging the adoption of smart meters and future services**	
12.1 Is the current regulatory framework appropriate for the current needs of metering and the market? Is it flexible enough to provide encouragement for the development of future services in metering?	While the current regulatory framework has only been in place for three years, it is apparent that there are impediments to realising the full range of potential benefits that smart meters can provide and that changes are necessary to improve its future effectiveness and efficiency. Energy Queensland considers that the metering framework should: • enable the full range of potential customer, retailer, network and other benefits that can be provided by smart meters to be realised;

[4] QCA, 2019, *Ministerial advice Benefits of advanced digital metering*, www.qca.org.au/wp-content/uploads/2019/08/ministerial-advice-benefits-of-advanced-digital-metering.pdf

	• provide market participants, such as network service providers, with certainty of access to metering services and data that will support the efficient operation of the grid and lead to lower electricity prices for customers in the long-term; • support sustainable business models for metering businesses in the competitive market, recognising that the market has monopoly characteristics and that consolidation could lead to reduced competition; and • reduce complexity and support efficient and cost-effective installation of smart meters.
12.2 To encourage the higher adoption of smart meters: (a) What changes, if any, need to be made to the current regulatory framework for metering services? (b) What changes, if any, need to be made to other instruments? (e.g. regulatory instruments, guidelines, codes)	Energy Queensland considers the following changes to the current framework should be considered: • remove existing regulatory barriers to realising the benefits of smart meter services, e.g. remote disconnection / reconnection; • expand the minimum services specification to ensure that it provides a sufficiently broad range of services and data to achieve maximum benefits from smart meters, such as engineering data to identify broken neutrals, and monitor power quality and network performance, and introduce appropriate mechanisms (e.g. access regulation) to ensure that smart meter data: − can be accessed on fair and reasonable terms and at a cost that reflects the reasonable cost to the MC of providing the service; and − can continue to be accessed following retailer or MC churn, while retaining the ability for DNSPs to install network devices at customers' premises that allow them to monitor, operate or control their networks for the purpose of providing network services as appropriate to securely, safely and efficiently deliver network services; • implement a consistent, NEM-wide approach to collection, storage, access and use of asset and engineering data, with appropriate privacy and security protections and integrated information systems; • initiate a program to educate customers on both the direct and in-direct benefits of smart meters as well as other

	complementary mechanisms (e.g. time-of-use tariffs) and technologies (e.g. in-home devices) that will enable them to extract greater value from their meter; and • continue to investigate opportunities to improve the smart meter installation process to provide a better customer experience and create efficiencies, for example by: − standardising installation processes to ensure consistency; − developing a solution for shared fusing arrangements that minimises customer inconvenience; and − simplifying the customer opt-out process by removing the requirement for a retailer to provide a second notice when proposing to undertake a new meter deployment.
12.3 Are there any other avenues of encouragement that are available that the Commission has not considered in this paper?	Energy Queensland is not aware of any other avenues of encouragement.
• **Barriers to realising the benefits of smart meters**	
13.1 Are there other barriers that were not identified by the Commission that you have found to prevent the realisation of benefits of smart meters and/or slowed the rollout of smart meters in the NEM?	Ergon Energy Retail is subject to jurisdictional regulatory barriers that inhibit the deployment of smart meters in greater numbers in regional Queensland, specifically limitations relating to the types of products and services it can offer to customers, including behind the meter services, such as load control. Ergon Energy Retail also faces obstacles with respect to site access and the suitability of customers' switchboards to accommodate a new smart meter when a faulty meter requires replacement as the requirement to upgrade the switchboard is the customer's responsibility.
13.2 What changes, if any, need to be made to the current regulatory framework for current arrangements to improve deployment?	Refer to answer to Q. 12.2 above.

13.3 Are there other tools outside of the regulatory framework that may address some of the current barriers to realising the benefits of smart meters and/or the slower rollout of smart meters in the NEM?	As noted above, initiatives to improve customer education are likely to enhance customer awareness of the potential benefits of smart meters.

OTHER COMMENTS

• **Information on additional issues**	Energy Queensland has not identified any additional issues at this time.

REGISTRATION OF INTEREST FOR REFERENCE GROUP

If you are interested in nominating for the Review of the regulatory framework for metering services Reference Group you can email registations@aemc.gov.au or provide details of the person you would like to nominate below:

Name	Glenn Walden
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