

20 February 2025



Ms Anna Collyer
Chair
Australian Energy Market Commission

Project Reference Code: ERC0399

Dear Ms Collyer

Directions Paper – Real-time data for consumers

Energy Queensland Limited (Energy Queensland) welcomes the opportunity to provide comment to the Australian Energy Market Commission (AEMC) in response to its Real-time Data for Consumers Directions Paper.

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

- Distribution network service providers (DNSPs), Energex Limited (Energex) and Ergon Energy Corporation Limited (Ergon Energy Network);
- Regional service delivery Retailer, Ergon Energy Queensland Pty Ltd; and
- Affiliated contestable business, Yurika Pty Ltd and its subsidiaries, including Metering Dynamics Pty Ltd trading as Yurika Metering.

Energy Queensland is supportive of initiatives which provide customers with the data necessary to understand and make decisions with respect to their energy use.

We consider, as stated in our [submission](#) in response to the [Consultation Paper](#), that the costs of customers accessing real-time access to data, should be borne by the parties receiving the data and that customers who do not want to access data, should not be paying for others who wish to do so. We acknowledge that the AEMC's proposed 15 year staged implementation appears to acknowledge our position and that of other industry stakeholders related to the costs of delivering such a service and the low demand for this service from customers.

Additionally, we encourage the AEMC to consider, when drafting the National Electricity Rules Draft Rule, whether new requirements to provide customers with real-time data will negate the current requirements, for example at Rule 7.14, for DNSPs to provide customers with metering data. We are of the view that the interaction of the existing requirements with new requirements would benefit from further clarity.

Energy Queensland's more detailed comments in response to the questions posed in the Directions Paper are set out in **Attachment A**. Neither this letter nor our enclosed comments contain confidential information.

Should you require additional information or wish to discuss any aspect of this submission, please do not hesitate to contact me at the contact details below or Mark Simpson on 0467 837 450.

Yours sincerely

A handwritten signature in blue ink that reads "Alena Christmas".

Alena Christmas
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Enc: Attachment A - Energy Queensland's comments on the AEMC's Directions Paper

Energy Queensland Limited

Response to AEMC Directions Paper - Real-time data for customers

Consultation Question	Energy Queensland Comments
<p>Question 1: Do you agree with a staged implementation approach for when customers pay for access to real-time data?</p> <p>a) Is 15 years the right time-frame for industry to achieve cost efficiencies in delivering real-time data access from smart meters? Are there ways to support industry to reduce this time-frame?</p> <p>b) Would the marginal cost to each customer be material in the long-term if costs were smeared across all customers after 15 years?</p> <p>c) Are there other ways to facilitate efficiency and equity and support industry to lower costs to customers?</p>	<p>a) Energy Queensland generally accepts the proposed 15-year time frame given the accelerated smart meter deployment will be substantially completed by the time the proposal comes into effect. We note that the 15-year time frame aligns with an assumed life of a smart meter installed from the date of the commencement of the initiative and that around half of the smart meters installed at that time will be older than 15 years at the end of the staged implementation period.</p> <p>The Directions paper states that the proposed time frame is ‘15 years from the commencement of any rule made’. We suggest that the National Electricity Rules (NER) Draft Rule would benefit from a firm date of when this proposal might come into effect.</p> <p>In consideration of the possible commencement date for enabling access to real-time data, we suggest that the AEMC contemplate:</p> <ul style="list-style-type: none">• The time required for all technical requirements to be developed and agreed - e.g. time frame for interoperability standards to be finalised.• The time required for the development and testing of Metering Service Provider (MSP)/Retailer systems prior to the start of customer requests for access to real-time data. <p>To support industry to deliver real-time data functionality sooner, Energy Queensland makes the following suggestions:</p> <ul style="list-style-type: none">• Prompt establishment of standards and technical requirements and publication of procedures as a priority, to allow Retailers and MSPs to facilitate faster development, delivery and broader availability of the functionality.• Further details are required from the AEMC on how the initiative will be implemented and which documents will need to be amended.

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<p>d) What incentives would our approach create for retailers, MSPs and third parties?</p>	<ul style="list-style-type: none"> • Consideration of the technology risks and associated costs to Retailers and MSPs to adopt new metering technologies during the latter stages of the accelerated deployment of smart meters (i.e. 2028-2030) and to avoid obsolescence to the greatest extent possible. <p>b) It is our view that the marginal cost to each customer would depend on the volume of uptake if costs were to be smeared across all customers. While we are broadly supportive of the AEMC’s proposal, we provide the below alternative for consideration.</p> <p>Instead of mandating a requirement for real-time data access from smart meters, an alternative could be to encourage MSPs or Retailers to offer alternative non-smart meter based solutions that have the ability to provide equivalent quality and timeliness of data whilst preserving the intended customers benefits. This could potentially be used as an interim measure during the first 15 years. For example, for small customers, allowing home energy monitoring equipment to be offered to customers as an alternative to smart meter based solutions (given the growing market and effectiveness of such products, which can include low-cost, self-install solutions). This flexibility, combined with a relaxing of the requirement from one second data to, for example, 15 second data (discussed further below), could provide greater choice for customers whilst ensuring the benefits of energy usage data is maintained.</p> <p>c) To support industry to lower costs to customers, Energy Queensland makes the following suggestions:</p> <ul style="list-style-type: none"> • Update the Minimum Service Specification to include real-time data functionality as soon as possible to avoid the deployment of meters which do not feature functionality which complies with future technical specifications - this will maximise the deployment base over which the development costs are amortised. • Finalise the technical specifications and standards (e.g. common communication interfaces/protocols, wireless range etc) as early as possible, including prompt definition and setting of standards which are currently widely adopted (i.e. not proprietary, bespoke or in limited use) in order to minimise the effort and time to implement (including in some cases design and build) the service capability. • Consider enabling a phase-in for access to real-time data commencing with an option to provide access when standards are set (some Retailers and MSPs may be able to do so quickly) ahead of a mandatory

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	<p>time frame. This could allow sufficient time for other Retailers and MSPs to develop and implement the capability while providing incentives for early development.</p> <p>d) Energy Queensland provides no comment.</p>
<p>Question 2: Should the prices for real-time data access be published by the AER</p> <p>a) How and where should the AER publish prices to access real-time data?</p> <p>b) What other measures would incentivise retailers to offer real-time data at competitive prices?</p>	<p>a) Energy Queensland acknowledges the potential for positive competitive outcomes which may arise from publication of prices to enable access to real-time data. Transparent pricing may lead to lower prices. However, we question the appropriateness of publishing of MSPs’ pricing to Retailers as this could potentially reveal commercially sensitive information of Retailers’ pricing structures. Further, while Retailers are customers of MSPs, Retailers will also incur some administrative costs from enabling access to real-time data for customers and will also be the first point of contact for customers when they experience any problems.</p> <p>Energy Queensland seeks clarity from the AEMC as to the form this publication will take. For example, will publication be limited to energy plans listed on the AER’s Energy Made Easy.</p> <p>b) Energy Queensland provides no comment.</p>
<p>Question 3: Do you agree with our proposed definition of real-time data?</p> <p>a) Does the proposed definition enable real-time data products and services to deliver the benefits of real-time data to customers?</p> <p>b) What other features of a real-time data definition should be described in AEMO procedures?</p>	<p>a) Energy Queensland welcomes the development of a definition for ‘real-time data’ and notes the importance of this definition to inform the development of the proposed real-time data service.</p> <p>However, Energy Queensland is of the view that customers may not require access to data ‘recorded every second and delivered within a second’ for basic use cases. The costs of enabling this, in our view, may outweigh the benefits to customers.</p> <p>A requirement for one second data would likely increase the cost and complexity of data delivery solutions with past metering experiences demonstrated performance issues where the same communications channel is shared with other data transactions. However, some meter-customer energy resources (CER) use cases require more rapid response. For example, AS/NZS 4777.2 requires inverters to comply with soft export limits within 15 seconds). but the marginal cost of providing on second (versus 15 second) should be considered alongside the additional benefits. Additionally, one second data accessed locally from the smart meter by a device on premises to enable home automation and control of inverters, batteries or electric vehicle charging, could be beneficial for</p>

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the customer who would otherwise need to install separate metering to enable these functions. Such capability may support and reduce the cost of dynamic connections for customers.

Energy Queensland's DNSPs have previously run a successful trial in which residential customers were provided energy and tariff related data, using 30 second interval data, using a low cost, self-install energy monitoring system. It is our view that, extremely granular, one second data, will not provide improved outcomes for the majority of customers in managing their energy usage or in managing energy costs, according to tariff options.

Further, Energy Queensland is of the view that the proposed definition may be overly complex and ultimately inhibit customer benefits from real-time data products and services. We are of the view that power and energy indicating usage either from or to the grid would be most useful to customers.

Key questions that such data should answer could include:

- What electricity am I using from the grid / exporting to the grid, right now (in kW)?
- What has been my historical grid usage / export to the grid (in kWh)– in time ranges from the last 5 minutes, last 30 minutes, last day, last week, last month(s)?
- What has been my demand from the grid during various periods – related to the typical calculation of billable demand in electricity tariffs (i.e. typically half hourly average demand).

Without requiring the provision of useable information, instead of raw data, this measure would likely require further costs to customers to access third party apps / portals / in-home displays to manipulate the proposed data requirements into useful information for the majority of customers.

When the definition is finalised, the Minimum Service Specification for smart meters outlined in the National Electricity Rules (NER) should also be updated to reflect the requirement for smart meters to provide real-time data to customers in accordance with this definition.

b) Smart meters can be configured to generate alarms - for example, voltage higher or lower than a specified threshold. If these alarms were made available to DNSPs in real-time, DNSPs could utilise advanced meter services such as polling/pinging to read a meter in real-time to understand what may be happening on the network or the extent of an issue. This would then allow DNSPs to respond to faults or other operational issues on the network

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	<p>which require immediate action. Neutral fault detection algorithms could also be implemented locally in the meter with the alarm sent to DNSPs in real-time.</p> <p>AEMO procedures should also include the following:</p> <ul style="list-style-type: none"> • Inclusions for definitions – for example, . unverified instantaneous meter reading, data format, delivery point, timing. • Exclusions from definitions – for example, data quality, data gaps, substitution of missing data, customer Wi-Fi limits. • The media for data provision – for example, wireless and/or physical connection port; protocols and data formats for use should be set during the standards establishment phase. • Performance standards.
<p>Question 4: Do you agree with the obligation on retailers to provide real-time data access?</p> <p>a) Are the proposed timeframes of 10 business days and 20 business days sufficient to enable retailers to give customers access to real-time data?</p> <p>b) Are there circumstances where the obligations on retailers to offer and give real-time data access upon customers’ request, and the timeframes within which to give access should not apply?</p>	<p>a) Energy Queensland notes that Retailers will not be the service providers for data from smart meters but, as with general metering services, Retailers are likely to be the party faced with the regulatory obligations for enabling access to real-time data from smart meters. In this context, Energy Queensland notes that the proposed time frames are similar to the time frames for meter exchange and, at this point, appear to be a reasonable starting point.</p> <p>However, Energy Queensland considers that the 20-business day time frame (and upfront charge provisions) should not be limited to cases where meter replacement is required. Instead, we suggest the time frame should recognise the need for MSP staff to attend site (i.e. a truck roll) to enable data access and provision, including where the entire metering installation or only components of the metering installation (e.g. modem or data interface unit) requires installation or replacement, and/or where local re-configuration of the metering installation is required. We suggest this approach may deliver a more efficient (i.e. lower cost) and a better customer experience (i.e. may not require an interruption to the customer’s supply).</p> <p>Further, in relation to commentary in the Directions Paper around applying obligations to MSPs to facilitate access, Energy Queensland seeks clarity from the AEMC as to whether Retailers should have any further role in enabling access to real-time data (i.e. to additional parties) following enablement of initial access (discussed further below).</p>

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<p>c) Are additional obligations on retailers required to enable the provision of real-time data access to customers?</p>	<p>Energy Queensland understands that current Retailer / MSP hardware / software options are not capable of providing real-time data. As suggested in response to Question 1(b), an alternative solution could be utilised during the proposed 15-year time frame.</p> <p>b) Energy Queensland recommends that the AEMC consider exemptions or relaxing obligations for cases where large volumes of requests for access to data are received at the same time from multiple customers (e.g. as part of a coordinated public campaign) and/or from customers with a large number of sites. This will be particularly important to consider when the provisions requiring upfront payment expire at the end of the 15-year time frame.</p> <p>Energy Queensland also suggests that exemptions be considered for meter exchange time frames (e.g. customer providing access) where site attendance is required to enable data provision (including where components of the meter require replacement). We also suggest it is appropriate for the AEMC to enable an exception regime similar to that which will apply to the accelerated deployment of smart meters (e.g. for defective switchboards etc).</p> <p>c) Energy Queensland provides no comment.</p>
<p>Question 5: Do you agree that MSPs should ensure multi-party, interoperable and secure access to real-time data?</p> <p>a) Are there requirements that we should impose on MSPs in addition to multi-party, interoperable and secure access obligations?</p>	<p>Energy Queensland considers that interoperability and secure access requirements are essential for the safe, efficient and cost-effective provision of real-time data services to customers. However, we note the challenges ahead for creating a truly interoperable technical environment which is agreed by all parties.</p> <p>Energy Queensland acknowledges the importance of adopting common standards and open protocols including those supported by global technology providers like Amazon, Google, Samsung and Apple, which will set the direction for smart device manufacturers. Interoperability mechanisms should not be dependent on bespoke or proprietary technology or require internet connection. Standardisation will be key to enabling authorised third parties to access the data efficiently and across multiple MSPs in order to realise potential benefits which may arise from use cases for energy management systems.</p> <p>Energy Queensland suggests that multi-party access arrangements could be provided by customers, similar to access controls for other services such as premises security. There is not a material difference in a customer using 'access tokens' to manage connection of their devices and providing access to third parties to connect their devices at the customer's premises, similar to customers managing access to apps on smartphones and mobile</p>

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	<p>devices. We suggest that a customer-based approach would be simpler than implementing arrangements to manage third party remote access to data from smart meters, like those used for the Customer Data Right (CDR).</p> <p>The AEMC should also consider the arrangements for managing data access where there is a change of customer at a premises or a change of Retailer which may subsequently result in a change of MSP. For example:</p> <ul style="list-style-type: none"> • Obligations on parties to cancel data access to the departing customer and any third parties to protect the departing customer’s privacy while facilitating continuity of services for the new occupant/customer. • If other devices at a premises access real-time data from the smart meter and the smart meter is replaced, which party is responsible for maintaining or reinstating the third party device access to real-time data? • Would the customer be charged again to enable the real time data access through their new Retailer and MSP?
<p>Question 6: Which customer consent pathway do you consider to be the most practical and why?</p> <p>a) Are there any barriers to implementing this pathway?</p> <p>b) Are there any viable alternative pathways that better deliver outcomes for customers?</p>	<p>a) Energy Queensland recognises that the Retailer has the primary relationship with the customer. However, this relationship is based on the sale of energy and the provision of services related to the sale of energy. Energy Queensland welcomes the AEMC’s acknowledgement that under a Retailer-centred pathway, Retailers will incur costs and obligations for which there are no offsetting benefits. While we acknowledge that a Retailer-centred pathway appears to be the most practical consent pathway for initial customer consent, as the Retailer has access to important customer information which enables identity verification, following the establishment of the data service, Retailers are unlikely to have access or the capability to support the MSP's services.</p> <p>b) In devising the consent management arrangements, Energy Queensland suggests the AEMC consider the customer experience for enabling connections of devices to the internet or apps. For example, a secure electronic consent process managed by the customer in real time, similar to logging in/joining a secure network where the customer enters secure parameters online which may include details such as account number, password, NMI, selection of an approved third party (from list) and 2-factor authentication. Ultimate consent to access data should vest exclusively with the customer.</p>
<p>Question 7: What should third party access consent look like?</p>	<p>a) Energy Queensland suggests that, in the interests of customers, the format for third party consent should not be determined by third parties. Instead, third party consent forms should be developed by the host of the mechanism</p>

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<p>a) Should the form of consent be left to third parties to determine?</p> <p>b) Should there be specifications placed on the form of consent that third parties must obtain from customers? If so, what could this look like?</p> <p>c) Should the process for the withdrawal of consent also be specified?</p>	<p>(e.g. AEMO or AER) with assistance from stakeholders, and Retailers and their service providers. This will ensure customers interests are considered.</p> <p>b) Energy Queensland is of the view that third party access should require informed consent and consent forms should be standardised to ensure minimum privacy and confidentiality requirements are met and which balances the needs of data users and safeguards against potential exploitation.</p> <p>c) Energy Queensland is of the view that the process for the withdrawal of consent should be specified. This will avoid ambiguity and ensure greater certainty. Energy Queensland also considers there may be value in periodic renewal of customer consent for third-party access e.g. 12 monthly, electronically.</p>
<p>Question 8: Should additional requirements be placed on third parties that request access to customer data?</p> <p>a) Should third parties be accredited by AEMO under the NER?</p> <p>b) Are there any other safeguards required to ensure third parties do not misuse data?</p>	<p>a) Energy Queensland would support an accreditation process for third parties who wish to access data from smart meters. Accreditation is a common practice in the National Electricity Market and is a proven way to ensure adherence to minimum practices and quality standards and would ensure some visibility of the recipients of data.</p> <p>b) Energy Queensland suggests the AEMC consider the development of a 'fit for purpose' registration scheme to meet the policy objectives for enabling access to real-time data for third parties. This could provide greater comfort for customer in the context of heightened awareness of and concern for cyber security and privacy.</p>
<p>Question 9: What features of the customer data right (CDR) can we adopt?</p>	<p>a) Energy Queensland agrees that the CDR is not an appropriate mechanism to deliver access to real-time data as the purpose of the CDR is fundamentally different from the purpose of accessing real-time data. However, we recognise that there are features of the CDR which may be useful to consider for managing access to real-time data. For example:</p>

Consultation Question	Energy Queensland Comments
<p>a) What specific features of the CDR would be beneficial to apply to third parties who seek access to real-time data?</p>	<ul style="list-style-type: none"> • CDR-style accreditation criteria should be required as a minimum, with additional criteria included regarding cyber security and privacy management capability. • CDR consent management arrangements could be viewed as a basis for developing a mechanism for real-time data. • Requirement to delete all data received by parties authorised to receive it once the consent is withdrawn.