25 February 2025

Ms Anna Collyer
Chair
Australian Energy Market Commission
Via online portal
Ref: ERC0399

Dear Ms Collyer,

PLUS ES submission re Real-time data for consumers Direction Paper

PLUS ES welcomes the opportunity to provide feedback to the Australian Energy Market Commission's (**AEMC)** Direction Paper on Real-time data for consumers (Ref: ERC0399).

PLUS ES is a registered Metering Co-ordinator (**MC**) and an accredited Metering Provider (**MP**) and Metering Data Provider (**MDP**) in the National Electricity Market (**NEM**). Our skilled, workforce provides metering services across Australia and supports Consumer Energy Resources (**CER**) deployment. We provide metering services through Retailers and directly to customers ranging from small residential customers through to Australia's largest manufacturers and mining operators.

PLUS ES's submission supports the following key points below:

- **Giving consumer choice through provision of real-time data** –
    - Support for real-time data (**RTD**) provisioning - We support the AEMC's direction for market participants to deliver a set of access outcomes whilst being technology agnostic.
    - Consumer access to RTD – We support a customer-initiated RTD access via the metering installation. We also recognise the value of diverse commercial products and services for CER device management and support consumer choice value driven alternative devices;
    - Definition of RTD – An outcome-based RTD definition is preferred over the prescriptive '1 second delivered within 1 second', proposing a 5-second delivery timeframe for better efficiency; and
    - Retailer centred pathway for consumer verification – Retailers, with existing customer relationships, are best suited for verifying customer access to meter data, avoiding delays and unnecessary costs associated with involving metering service providers[1] (**MSP**) who do not have customer agreements with small customers.
- **Promoting consumer outcomes without being cost prohibitive to the industry** – Whilst PLUS ES supports providing real-time data to consumers, this new functionality will impose additional costs on the MSP, including upfront and ongoing variable costs. The following achieve a balance between reducing industry costs, enabling a beneficiary pay model and promoting innovation and

[1] Metering service provider has been used as a metering party collective term to include MC/MP/MDP.

technology advancement.

- Equitable Cost Distribution - We support the AEMC's proposed 15-year staged transition to RTD as it distributes costs equitably, focusing on customer-initiated requests. A faster transition or universal mandate would impose greater costs[2] without corresponding benefits, and a predictable timeframe ensures efficient operations[3] and sustainable returns;
- Data Delivery Responsibilities - Limiting MSP obligations to metering infrastructure (recording and delivering meter data) to minimise industry costs. MSPs should not be responsible for the consumer's/third-party's infrastructure or device performance, especially when the fulfillment of obligations is dependent on third parties.
- Enabling commercial arrangements for MSP and user pays model - Sustainable commercial returns will ensure the MSP remains commercially whole:
  - We support the enablement for MSPs to pass on the costs of enabling RTD to Retailers and manage the ongoing costs with Retailers through commercial contracts.
  - We do not agree with the AEMC's assumption *that RTD from a smart meter should be free to third parties because the costs to extend access to these parties would be immaterial, given the meter would already be retrofitted and a data stream would be established*. RTD delivery should be consumer-focused and the AEMC should allow MSPs to charge for additional data services beyond basic consumer delivery as the MSP cost to extend and maintain the access to third parties is not immaterial; and
  - Facilitate commercial agreements for MSPs to provide data[4] to third parties, promoting innovation and sustainability opportunities within the dynamic energy market.
- Publishing the MSP's RTD rates – We do not support this proposal as the substantial risks to competition and innovation[5] outweigh any potential gains in transparency. The negative consequences, outlined in our response (Appendix A, Question 2).

- **Defining technical/interoperable standards** – We support that these need to be defined to ensure diverse systems can communicate and exchange information seamlessly to deliver this efficiency. We agree that defining standard formats of data delivery fall into AEMO's remit, and support other protocols need to be determined at Australian Standards or similar standards so that the interoperable protocol/capability is the same across the market;
- **Approaches to enable third party access to RTD from smart meters** – Allowing third-party local access to consumer data introduces risks, including information security threats, and the potential for data misuse. We support the following to minimise the risk and deliver a cost-efficient approach:
  - Providing real-time data access locally by a unidirectional or one-way signal;

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[2] Such as requiring assets to be retired prematurely impacting market efficiency.

[3] Provides MSPs with a predictable timeframe for asset and technology planning and optimization.

[4] Including de-identified data.

[5] Stifle innovation by MSPs and Retailers, as MSPs deliver the lowest cost real time solution akin to an in-home Bluetooth device which has previously not supported broad adoption or utilisation.

- Ensuring transparency and explicit informed consent[6] is vital to protect consumer interests; and
- Enabling the customer to manage the third-party access in alignment with the agreements they have in place;

- **Proposed Effective Date:** PLUS ES proposes in determining the Effective Rule date the AEMC the AEMC must account for dependencies such as, the development of technical and interoperability standards and their subsequent adoption timelines.

Appendix A is a table of PLUS ES's response to the Direction Paper's questions. PLUS ES would welcome further discussions in relation to this submission or any other item relating to RTD. Please contact Helen Vassos on 0419 322 530 or at Helen.Vassos@pluses.com.au.

Yours sincerely,

Rob Amphlett Lewis

Group Executive of Distributed Services and PLUS ES

[6] PLUS ES agrees that the customer must be aware that their RTD is being accessed and for purposes they have agreed to. Hence customer consent is 'explicit informed consent' rather than 'deemed'. Additionally, we propose that the AEMC in their considerations for customer consent remain technology agnostic to enable operational efficiencies.

APPENDIX A – ANSWERS TO THE DIRECTION PAPER QUESTIONS

Questions	PLUS ES feedback
1. Do you agree with a staged implementation approach for when consumers pay for access to real-time data?	
PLUS ES overall supports the AEMC's direction for a beneficiary pays model and enabling a regulatory pathway for MSPs to earn sustainable commercial returns on establishing and delivering this service as this new functionality will impose additional costs on the MSP, including upfront and ongoing variable costs. We disagree with the AEMC's assumption that the costs in extending access to third parties are immaterial. MSPs incur costs for extended access and custom services, especially those requiring a change to the MSP's existing RTD infrastructure and/or delivery mechanism. Excluding the scenario where a consumer provides their data directly, (manually or via electronic access), to the third party, MSPs should be allowed to establish commercial agreements for sustainable returns on these services. This is similar to Australia Post's mail forwarding service: while basic delivery is covered by postage, customers pay extra for forwarding to a different address.	
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 timeframe?	PLUS ES supports that a 15-year timeframe is reasonable for the industry to achieve cost efficiencies in delivering RTD from smart meters. A 15-year rollout, matching smart meter lifecycles, avoids costly retrofit costs and allows for a fair, cost distribution and beneficiary-pays system. The timeline should commence after the technical standards are set and adopted. The smart meter infrastructure and supporting technology are major costs drivers in the delivery of RTD. A faster rollout of RTD capabilities would require substantial industry investment, mitigating the equitable and cost-efficient approach.
b) Would the marginal cost to each consumer be material in the long-term if costs were smeared across all consumers after 15 years?	The marginal cost to each consumer can only be assessed in today's terms. Consumer cost projections are uncertain due to future technology and dependent on the MSP's responsibility boundaries i.e. the point at which the MSP's obligations end, and the consumer's obligations begin. It is anticipated that after 15 years, the additional cost of provisioning RTD access will be marginal compared to the standard metering expenses, however, not necessarily immaterial. Achieving this requires the MSP to have sustainable commercial returns or a way to recoup those costs, such as charging consumers for site visits when the problem lies with their own equipment.
c) Are there other ways to facilitate efficiency and equity and support industry to lower costs to consumers?	In addition to the proposed 15-year approach and the customer-initiated provisioning, technological advancements and competitive market forces will support industry to lower costs. Additionally, encouraging tariff reforms to eliminate cross-subsidies will promote competition and innovation. i.e. implementing cost reflective pricing for services provided or time-of-use (**TOU**) pricing which aligns prices with demand patterns, will ensure that each consumer's costs is reflective of their usage and services.

	Standardised technology for real-time data is also crucial for cost-effective implementation. While real-time data delivery should be technology-agnostic, using Australian Standards, rather than just high-level rules, will ensure interoperability and reduce long-term costs. For example, standardising real-time data functionalities and protocols, like it was done for remote disconnect/reconnect in Power of Choice meters through Australian adoption of IEC62052.31, prevents costly variations in hardware and functionality across manufacturers. The minimum service specifications (**MSS**) merely defined a high-level requirement, but in the background, the industry collaborated with Standards Australia, to adopt IEC62052.31 as an Australian Standard, which defined at least a minimum safety performance of the hardware and later specified hardware functionality.
d) What incentives would our approach create for retailers, MSPs and third parties?	The staged approach could create the following incentives: • Metering Parties – Develop and deploy solutions for more efficient and low-cost technologies to deliver RTD prior to the expiration of the 15 years' timeframe; • Retailers – Develop customer products and services offerings to assist the consumer to identify areas of potential savings, support DER programs including TOU tariffs; and • Third parties –New business opportunities to develop innovative solutions and services to optimize CER integration and support grid management by creating a market for RTD services.
2. Should the prices for real-time data access be published by the AER?	
a) How and where should the AER publish prices to access real-time data?	Market forces will ensure competitive pricing without requiring the publication of MSP rates. This proposal introduces substantial risks to competition and innovation. We believe these negative consequences outweigh any potential gains in transparency. Hence, PLUS ES opposes the publication of confidential, negotiated MSP rates for several reasons: • Small customers are more focused on their Retailer's overall energy price than the cost of RTD provisioning. Irrespective, the current regulatory framework does not allow them to select their MC. Empowering the small customer and enabling direct choice would trigger significant, likely wholesale, market changes; • Large customers and third parties – overall bilateral agreed rates offer significant benefits compared to published rates in terms of customisation, cost savings, relationship building, and competitive advantage. • Reduced competition – Parties reluctant to offer lower rates if their pricing will be public leading to price rigidity; • Smaller parties maybe disadvantaged to compete against established players' pricing strategies; • Fluctuations in rates may lead to consumer confusion and mistrust in MSPs; • MSPs may be less willing to experiment with new pricing models or service offerings if they know their competitors will immediately be able to see and match them; • Rates vary based on bilaterally agreed service levels, making direct comparisons difficult without dismantling existing arrangements and creating an artificial 'default' product. Even then, negotiated rates would still apply; and

	• Retailers publish the overall rates for their products and services, including energy prices. However, these energy prices are often aggregated and not typically broken down into individual components. This may also cause customer confusion and mistrust in Retailers.
b) What other measures would incentivise retailers to offer real-time data at competitive prices?	The competitive landscape in the retail market should be sufficient and no further measures should be required, as: • Retailers are motivated to attract and retain customer market share; • Market dynamics will naturally drive down prices and encourage innovation in real-time data services; and • Minimising regulatory intervention allows market forces to operate freely and efficiently.
3. Do metering parties currently have a competitive advantage?	
a) Does the proposed definition enable real-time data products and services to deliver the benefits of real-time data to consumers?	PLUS ES recommends that the definition should be outcome based rather than prescriptive. The proposed definition of RTD also requires some clarity and a clear delineation of obligations and responsibilities. In the absence of these delineations, the cost to serve could be significant to the MSP. PLUS ES provides the below items for the AEMC's consideration: • **RTD definition:** ○ 1-second RTD requirement: PLUS ES supports that a '1-second interval delivered within 1 second' isn't necessary for most use cases. It is overly prescriptive and burdens industry systems and communication infrastructure for minimal gain, especially for small customers. For example, 5-second delivery/data is sufficient for CER management use cases, such as SA Dynamic Export Limits, and more than suffice for consumer consumption requirements. Furthermore, the data volume could negatively impact consumer network performance, particularly for those with limited bandwidth; ○ 'Within a second' clarification: This is a relative definition. The delivery timeframe of 'within a second' requires defining start and end points to establish clear obligations. PLUS ES recommends the RTD definition should be outcome based rather than have prescriptive requirements; and ○ Data elements to be provided: Whilst defining common data elements, such as voltage, current and phase angle, delivers efficiencies, in support of an outcome-based definition, determinations should not preclude the provisioning of direct energy consumption data. • **MSP responsibility limited to metering:** PLUS ES supports limiting the MSP RTD obligations to the metering infrastructure itself - specifically, recording and providing data in an industry agreed format to the RTD metering interface. Consumers and/or third parties should handle all further processing and interpretation of real-time data, ensuring clear responsibility and reducing industry costs. MSPs should provide standardised data packets, and not be liable for consumer-related latency or connectivity issues. For example, a consumer changes their internet provider and loses RTD connectivity (e.g., via Wi-Fi), restoring that connection is their responsibility, just like any other connected household device/service.

b) What other features of a real-time data definition should be described in AEMO procedures?	There is a gap which may be poorly understood by the market between the 1 second data and the interval market data in the meter used for billing calculations. The 1 second data approximates the energy changes happening continually during that second which are summed inside the meter registers. In addition, there is an allowed tolerance for time mismatch in the rules (±20 seconds) between the time the meter uses to calculate its intervals and the time perceived by the consumer. Additionally, there may be a further discrepancy in the interval market data which may be available to the consumer through a Retailer portal from the time the meter was last read due to application of Estimation and Substitution rules.
4. Do you agree with the obligation on retailers to provide real-time data access?	
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?	PLUS ES agrees with the proposed timeframes, but only if they commence after the consumer's explicit informed consent has been received and the customer has been verified by the Retailer. For example, retrofitting or exchanging the metering installation and meeting the planned interruption obligations with the prescribed timeframes would not suffice if the Retailer were to take 10 business days to verify the customer.
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?	The AEMC should clearly distinguish and separate the obligations of the MSP making RTD available and the consumer accessing the RTD. The MSP responsibility (which would link up with Retailer responsibility) is to enable RTD capability at the metering installation including making RTD available at the metering interface. This should be limited to the usual challenges with installing a meter. This should not be confused with the consumer's responsibility to access RTD from the metering interface, as this might have challenges which should be on the consumer to resolve. For example, a meter in the basement with inherent difficulty organising connectivity between the metering interface and the consumer's endpoint or the consumer downloading an app to view their RTD where the obligation falls on the consumer and the application provider. As per current metering obligations, there are dependencies outside the Retailer's or the MSP's control. Caveats need to be allowed for: • Robust communications network availability – type of consumer infrastructure i.e. mobile tethering, bandwidth constrains; • Customer access to metering equipment - Dependency on the consumer or a third-party providing access to the metering installation; • Customer agreement for network communications - if a consumer refuses communications remote or otherwise, RTD is not a possibility;

	• Site readiness - multi occupancy premises where the metering assets are in the basement etc. and strata is required to provide communications access; • Defects which need to be remediated – even if a smart meter has been installed in the past; and • Retailer does not have a current customer agreement for the NMI and cannot validate the customer.
c) **Are additional obligations on retailers required to enable the provision of real-time data access to consumers?**	For market efficiency, some additional requirements should be considered. Retailers, by virtue of their established customer relationships and associated contractual agreements, are optimally positioned to fulfill these requirements. MSPs, in contrast, do not enter into direct agreements with small customers and consequently lack visibility into on-premises or customer-specific statuses, including sensitive information such as domestic violence indicators. • Similar to CDR – validating the customer access rights for the RTD requested; as the Retailer has the most recent customer agreement; and that explicit informed consent has been provided (if the request comes directly from a third party); • Retailer advising MSP of withdrawal of consent or customer churn, as they become aware, to protect customer's privacy; and • Retailer support for customer enquiries – first level support – provides access and delivers first level triage to eliminate customer user errors.
5. Do you agree that MSPs should ensure multi-party, interoperable and secure access to real-time data?	
a) **Are there requirements that we should impose on MSPs in addition to multi-party, interoperable and secure access obligations?**	PLUS ES supports that the requirement should be technology agnostic. We do not support mandating that MSPs (or Retailers) provide multi-party access to RTD for several reasons: • Technological evolution requires flexibility, and mandating MSP or Retailer responsibility reduces innovative approaches. The MSP's obligation is to make RTD available at the meter, securely accessible by the consumer. It is then up to the consumer to determine how that data would be further shared to other parties; • Consumers should control and be aware of their data distribution, understanding the use cases for multi-party access; • Consumers should be responsible for sharing data with third parties, like how they share electricity bills with brokers or bank statements with financial planners. The original data provider is not involved in these transactions; • Consumers may prefer to keep their data sharing arrangements private from MSPs and Retailers. For example, a consumer using a third-party energy management service might not want their Retailer to be aware; and • MSPs lack established connections with small customers, making customer interaction and verification costly, unlike Retailers who already have these systems in place.
6. Which consumer consent pathway do you consider to be the most practical and why?	

a) Are there any barriers to implementing this pathway?	PLUS ES supports the idea that the original validation of the consumer should be actioned by the Retailer as they have the commercial agreement with the customer. Once the consumer has been validated as being entitled to RTD at a premises, making the consumer responsible for forwarding / configuring the data is the most simple, practical and cost-effective mechanism.
b) Are there any viable alternative pathways that better deliver outcomes for consumers?	For the reasons outlined in our response to question 5, we do not believe the other alternatives are suitable.
7. What should third party access consent look like?	
a) Should the form of consent be left to third parties to determine?	This question assumes it is the third party who will be seeking the consumer's consent and then providing it to another party to validate. If so, standardised, explicit (not deemed) consent is crucial to protect consumer rights and privacy. Alternatively, if the approach remains technology agnostic and verified consumers can provide RTD to whomever they choose (as per our response to question 5), then consent may not be required. By controlling data forwarding, consumers effectively choose who receives their data, providing explicit consent through their actions. For example, a consumer logging into their CER's app, establishing a login password and personally linking the app to their Wi-Fi for sharing access to RTD, is a far more robust form of explicit consent than an electronic form with a consumer's scribble for a signature. The consumer could also determine what form of consent or assurances they require from those third parties.
b) Should there be specifications placed on the form of consent that third parties must obtain from consumers? If so, what could this look like?	Following a technology-agnostic approach, consent for third-party real-time data access should be flexible, like sharing electricity bills. While specific consent forms shouldn't be mandated, strong security measures like two-factor authentication are essential, along with standardised privacy and security terms.
c) Should the process for the withdrawal of consent also be specified?	Real-time data access mechanisms must include clear withdrawal processes, allowing for direct consumer revocation (e.g., hardware disconnection or removing previously authorised IP addresses) and Retailer-initiated MSP notifications to protect the privacy of new consumers who may be unaware of pre-existing third party RTD arrangements.
8. Should additional requirements be placed on third parties that request access to consumer data?	
a) Should third parties be accredited by AEMO under the NER?	PLUS ES does not support an AEMO accreditation pathway for third parties regarding RTD access as it would impose unnecessary costs on the industry, create unfair distinctions between third parties based on RTD provisioning methods, and potentially create a barrier to entry for smaller businesses:

	• Accrediting all third-party real-time data providers is impractical due to independent consumer arrangements, especially via alternative devices. Consumers can manage these access arrangements and can revoke them without a third party's knowledge; and • The unidirectional RTD flow from the metering installation reduces cybersecurity risks and consumers providing explicit informed consent (responsible for understanding how their RTD will be managed), overlayed with the Privacy Act 1988, should mitigate the requirement to overregulate this service.
b) Are there any other safeguards required to ensure third parties do not misuse data?	PLUS ES does not believe any further safeguards are required to ensure third parties do not misuse data: • We consider real-time electricity usage data no more sensitive than other types of consumer data that individuals routinely share, and therefore it does not warrant unique regulatory treatment; • Data-sharing agreements, including dispute resolution pathways, should be handled directly between the consumer and the third party before access is granted; • Consumers should retain ultimate control and should be enabled to revoke third-party data access if they consider their data is being misused; and • The one-way flow of this data also mitigates a cybersecurity risk. Any information security threats and monetisation of the consumer's data will need to be considered by the consumer on engaging a third party.
9. What changes would be required to ensure interoperability?	
a) What specific features of the CDR would be beneficial to apply to third parties who seek access to real-time data?	