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Australian Energy Market Commission
Level 15, 60 Castlereagh Street
Sydney NSW 2000

Submitted online at: https://www.aemc.gov.au/contact-us/lodge-submission
Response to AEMC Directions Paper – ERC0399
National Electricity Amendment (real-time data for consumers) Rule
National Energy Retail Amendment (Real-time data for consumers) Rule

Dear AEMC Team,

Thank you for the opportunity to comment on the AEMC *Directions* Paper - "Real-time Data for Consumers" 30 January 2025. This response is a follow-on response to our submission to the previous AEMC Consultation Paper – "Real-time Data for Consumers" dated 10 October 2024. We would encourage the AEMC team to review that submission as the background for this submission.

We would also like to refer you to Appendix 1, which we have marked as confidential and not for publication.

Further, we would like to seek a meeting with the AEMC at your earliest convenience to discuss both our submission and other confidential information not included within.

This response is a joint response on behalf of both Rheem Australia Pty Ltd (RAPL) and Combined Energy Technologies Pty Ltd (CET), as we have a complementary interest in the AEMC's consultation paper. Our views, concerns and recommendations as outlined in this submission, draw from our extensive experience across our fleet of thousands of residential and commercial mixed CER sites we have deployed across the NEM and WEM, whereby orchestration of these mixed CER sites is to the benefit of consumers, to enhance grid security of supply, and to support and accelerate the hosting of renewables on the grid. All our sites required the installation of our own Class 1 meter (developed by CET) to provide real-time, "instantaneous" meter data, including voltage, current, power factor, reactive and active power, in the provision of HEMs and grid services. We use our site/home metering for services including:

• compliance with DNSP-mandated dynamic connections and solar backstop requirements,
• consumer HEMS CER orchestration,
• DNSP minimum and peak demand abatement services via aggregated CER, and
• FCAS services for grid security of supply.

The installation of our own Class 1 meter could have been avoided at thousands of sites, and it can also be avoided at future installations, if we have local access to metering data—including real-time data—on a technically and commercially neutral basis at the consent of the consumer as the owner of both the meter data, and behind the meter Consumer Energy Resources (CER), including any CER that may be currently controlled by the meter.

Such access would simplify the CER market for metering data. As consumers are the owner of the meter data, an accredited third-party must obtain the consumer's permission to use the data. The same requirements should be applied to MSPs and retailers for all meter data not used for the strict purpose of settlement and billing.

As installation of a parallel Class 1 meter can cost up to $1200 per site, this is an impediment to the broader uptake of CER as it limits the accessibility of CER technology to those who can afford it. This impediment limits the uptake and control of CER for the above services and is impacting on the transition to a two-way grid and the transition to net zero. Rule changes to enable access to metering data locally, including real-time data, will realise significant cost savings (estimated to be 10's of millions of dollars over the coming years) and provide significant benefits to both consumers and the grid whilst also enhancing network security of supply.

We have elaborated further on the above in our response to the directions paper questions which can be found in Appendix 2 of our response.

As the largest Australian manufacturer of water heaters, Rheem markets a wide range of solar, heat pump, high-efficiency gas and electric water heater models to the domestic water heating market. Our brands include Rheem, Solahart, Vulcan and Aquamax. Additionally, we are now the number three supplier of photo voltaic (PV) systems in the country via our Solahart channel. Today, Rheem has products in over 4 million Australian homes. Over the last eight years, we have also commenced the manufacturing and installation of smart electric water heaters with inbuilt metering, which can be orchestrated locally with other CER via Combined Energy Technologies Pty Ltd.'s (CET's) HEMs and in aggregation controlled remotely by CET cloud platform for grid services.

CET is an Australian technology company specialising in energy management for residential, commercial, and microgrid systems. CET systems utilise CET's local Energy Management Gateway to provide secure communications and local orchestration for a wide range of CER devices and CER manufacturers. Local orchestration of CER devices is achieved through a suite of CET Energy Management modules that provide cost-effective Class 1 power metering, communications, and CER control. CET has extensive experience in the integration and orchestration of systems with multiple CER devices, including the integration of solar PV, batteries, water heating, electric vehicle chargers, pool pumps and A/C for the benefit of the residential consumer, retailers, DNSPs, and the grid.

Together, Rheem and CET have been actively participating in the emerging orchestrated CER market for nearly 12 years with thousands of cloud-connected, mixed, orchestrated CER sites (Solar PV, batteries, smart water heaters, HVAC, pool pumps, EV chargers, and other CER) across the NEM and the WEM. Over the past 12 years, we have identified and resolved many issues (at live field sites) associated with how mixed, smart CER sites can be orchestrated to achieve the best financial outcomes for consumers whilst providing a foundation for grid support services and, hence, grid security of supply. Our observations, concerns and comments in this response to the consultation paper are supported by empirical data from our existing fleet of thousands of NEM and WEM consumer and commercial sites of mixed CER. The data from these sites support our technical and commercial conclusions that align with the National Electricity Objective (NEO) principles.

Beyond the questions centred on access to real-time data, we have raised issues that must be dealt with in parallel if the Commission is to deliver consumer-centric outcomes as one of the Commission's stated objectives and, in doing so, ensure adherence with the NEO. This should be the key focus of any rule changes.

As such we strongly disagree with the AEMC's statement in the directions paper that:

"The Commission considers that MSPs do not have a material competitive advantage".

In support of our disagreement with this statement, we have provided empirical and other evidence backed by our deployment of thousands of mixed CER sites across the NEM and WEM. This extends to examples of how innovation, competition, consumer benefits (including financial benefits) and consumer choice of CER third-party service provider will be increasingly restricted, and at a competitive disadvantage if MSPs are allowed to expand the smart meter to deliver embedded CER software services, and control of CER integrated with and attached to the meter, along with other services, enabled by their current exclusive access to the meter. We refer to Appendix 1 and Appendix 2 of our response. Noting that Appendix 1 is confidential and not for publication.

The meter should be a technically and commercially neutral enabler for the provision of CER products and services and not a competitor to third-party providers of CER products and services.

Product manufacturers and off-market third party energy market service providers cannot access the evolving market that the MSPs are creating for themselves using the on-market metering installation that only they can access. This regulatory loophole or market failure creates uncertainty and prevents other suppliers of CER products and services from entering the market. Competitive service offerings, combined with a wide choice of CER products, are needed to drive down consumer prices.

If these issues are not resolved, innovation and open market competition for off-market CER products and services behind the meter, including HEMS, DNSP DR, and DNSP Dynamic Connections, along with competition in the supply of aggregated CER grid services by non-FRMP participants will be severely compromised, resulting in consumer lock-in and competition lockout that will eventually destroy the off-market third-party Energy Market Service Provider ecosystem.

As part of any rule change it must be clearly stated that the meter data belongs to the consumer, and that local access to meter data, including real-time data, should be free to the consumer and their assigned accredited third-party agent.

We have outlined our recommendations for changes to the NER and NERR in Appendix 1 of our response to the directives paper.

As this submission has been prepared using the expertise of Rheem and CET personnel, I would ask that any enquiries related to the submission be directed to the contact(s) below in the first instance. If required, we will then co-ordinate follow-up responses to your enquiries or further meetings with the appropriate personnel within our organisations.

Yours Sincerely,

Scott Ostini
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APPENDIX 2
Response to Directions Paper Questions

> **Question 1: Do you agree with a staged implementation approach for when consumers pay for access to real-time data?**
>
> 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?
>
> b) Would the marginal cost to each consumer be material in the long-term if costs were smeared across all consumers after 15 years?
>
> c) Are there other ways to facilitate efficiency and equity and support industry to lower costs to consumers?
>
> d) What incentives would our approach create for retailers, MSPs and third parties?

Rheem / CET response:

Response to Q1 a)

Fifteen years is a very, very long time in the technology space; smart meters that are being deployed now can provide data, including Real-Time Data (RTD). Access to data and RTD by consumers and accredited third parties appointed by the consumer needs to be provided as a matter of urgency to ensure innovation, competition and maximum consumer benefits, along with consumer choice of service provider as we transition to a two-way grid and a net zero future. We consider a 15-year timeframe will kill innovation and competition in the industry and severely restrict consumer choice in how they monetise their CER assets.

Many options exist now to extract data from the meter via both the head end systems and directly at the meter with RTD able to be extracted at the meter from deployed smart meters such as those from EDMI.

   i.   We refer the AEMC to supporting evidence that enables existing deployed smart meters to supply local RTD access:

        Modules that support local Wi-Fi, RS232m, and RS485 communications options exist now and are used for local data access from meters in embedded networks.

        Products are offered by several manufacturers including Influx data in New Zealand. See www.influxdata.nz (we note that Influx data was recently acquired by an MSP)

        A sample of products that can be used for RTD local access on smart meters include:

        https://cdn.sanity.io/files/06o4fcfm/production/1dbb3dce48ba2ba767bffc872f910f374bf3217c.pdf

        https://cdn.sanity.io/files/06o4fcfm/production/9114733d788d44d269eb78b61da8d90114caf882.pdf

   ii. We refer the AEMC to the following information for new meters:
        EDMI's submission to the AEMC Consultation Paper – "Real-time Data for Consumers" dated 10 October 2024, states:

        Extract from EDMI answer to Q2 - *"New generations of meters (due for delivery 2025)*

natively bring local connectivity in the form of long-range blue tooth which can integrated and connected to householder equipment such as solar inverters, EV chargers and client Applications. Clearly local connectivity does not incur telco costs. The meter has pods incorporated within the design that have high speed access to the meters core computing along with large power supplies. For example, Wi-Fi could be added/retrofitted to meters. A pod-based approach allows the meter to be cost optimised in its base configuration, functionality can be added usings pods, such pods could potentially be mailed out to consumers as live parts are not exposed during installation."

AND

"Yes, we believe the benefits and savings of improving data visibility far outweigh the insignificant cost."

AND

Extract from EDMI answer to Q3 - *"There is a perception that metering parties are well placed but as mentioned earlier in these questions, it is a relatively simple task for Head End systems to direct meter data to multiple endpoints (third parties). By making such changes new market entrants bringing innovation could be accommodated."*

In respect to a third-party accessing meter data (but not real time data) per the EDMI statement above - i.e. directly from the meter head end cloud infrastructure – this requires changes to the NER, Chapter 7 to enable access for a third party.

Hence there a many paths / existing option available as provided by industry to reduce / eliminate the proposed 15 Year timeframe.

Response to Q1 b)

We do not believe the marginal cost to be significant based on the above evidence and the resultant innovation, competition, consumer choice and wider industry, grid and societal benefits that will be a direct result of access to data, including RTD from the smart meter. As such, we do not believe there should be any costs to consumers for local access to RTD. This was our view in our previous submission. Note that this view is supported by other stakeholders such as EDMI – extract from Q8 response to their previous submission – *"Consumer cost savings will far outweigh the cost, costs could be absorbed within the savings."*

Response to Q1 c)

Yes. If the Commission continues to allow the evolution of the meter to:
- incorporate bespoke software, control relays, communications systems, and other capabilities that use/analyse consumer meter data and control CER directly or indirectly from the meter to the commercial benefit of the MSP / retailer, and/or
- use/analyse consumer meter data and control CER from a remote cloud connected to the meter via any means, including by the regulated communications (e.g. 4/5 G) to the meter, to the commercial benefit of the MSP / retailer.

Then, to ensure maximum consumer benefit, Chapter 7 of the NER should be updated to ensure that meter capabilities and software beyond those required for only settlement and billing are also available to any accredited third-party on a technically and commercially neutral basis, both locally from the meter and remotely from an accredited third-party's cloud, without favour to the MSP and with the consumer as the consent authority.

Response to Q1 d)

Having multiple third parties able to provide a range of CER products and services enabled by local access at the meter to RTD will create a market for innovation and competition, resulting in new lower-cost CER products and services that third parties can offer retailers and consumers. Currently, retailers are also restricted in their choice of CER products and services due to constraints imposed by MSP control over the meter. We note that RTD access is only one aspect of the meter that will deliver consumer benefits and that software and hardware for the control/monitoring of CER embedded in or attached to / controlled by the meter needs to be available as well on a commercially and technically neutral basis to the consumer / accredited third parties assigned by the consumer. Hence, there are many incentives for retailers and third parties to achieve the above.

Question 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?

b) What other measures would incentivise retailers to offer real-time data at competitive prices?

Rheem / CET response:

Response to Q2) a)

Access by the consumer to their own data should be regulated. In respect to price, please see our response to Q2) b) below.

Response to Q2) b)

The data is the consumers' data. It should be freely available to the consumer and their accredited authorised representative(s) with the consumer's consent.

Any use of meter data outside the primary purpose of settlement and billing must be with the consumer's consent.

Supporting this statement, please see our responses to Q1, which detail access to data, including real-time data.

Question 3: Do you agree with our proposed definition of real-time data?

a) Does the proposed definition enable real-time data products and services to deliver the benefits of real-time data to consumers?

b) What other features of a real-time data definition should be described in AEMO procedures?

Rheem / CET response:

Response to Q3 a)

We agree with the 3 data points specified by the AEMC to be locally available at the meter, i.e.

- Voltage
- Current
- Phase angle

However, the proposed definition of delivery time frame ("to occur within a second") may be open to interpretation so for clarity we suggest that the delivery time frame be stated as:

- at no less resolution than once per second - 1 Hz frequency of delivery time frame

Further, we disagree that the data points should be limited to these 3. Please see our response to Q3 b) below

Response to Q3 b)

AEMO Meter Data Provisioning procedures should also specify accumulated, time-stamped energy data (import and export kWH/kVAH registers) and interval data demand records (kW/kVA) should also be available locally at the end of every 5-minute interval (time stamped) or, if not supported by the metering installation, every 30-minute interval (time stamped) until the metering installation software is remotely updated to include support for 5-minute interval data.

This should be available locally so that a local calculation (e.g. via a HEMS from the proposed 3 data points) by a third party of the energy data can be compared to the energy values calculated by the meter. This enables a check to be performed on (unvalidated) energy data for both the third-party service provider and the consumer, e.g. so that third-party energy data (calculated from the 3 data points) that is displayed to a consumer (e.g. via local in-home displays or third-party apps) has alignment with the meter's calculated energy data.

Note: The test that should be applied to the real-time data supplied by the meter is: "Is the local real-time data provided of a type, accuracy, and frequency sufficient for a calculation (external to the meter) by a local control system of the import/export energy using the real-time data supplied at the meter communications port, achieving similar (class 1) accuracy to a calculation conducted by the meter itself?"

The same logic applies to local access for demand register data from the meter, which would enable third-party calculations to be verified, considering the increasing use of residential demand tariffs.
There is no downside to having access to all data registers of the meter.

To ensure technical and commercial neutrality in the provision of data to the consumer and the consumer's authorised third parties, AEMO procedures should also specify that:

The consumer and their accredited representative(s) should not be precluded from accessing any data locally (or remotely) from the metering installation that is used at any time by the MSP or retailer for any purpose beyond that required for settlement and billing. Any use of such data should also require the consumer's prior consent. This would ensure a level playing field and commercial neutrality in use of metering data including RTD.

Finally, we submit that the consumer and their accredited representative **should also have access to metering data from the metering head end**, this may also include delayed time stamped pseudo RTD at an agreed frequency. We submit that the cost to implement this is negligible and refer the AEMC to EDMI's submission to the previous RTD consultation last year.

Extract from EDMI answer to Q3 - "There is a perception that metering parties are well placed but as mentioned earlier in these questions, it is a relatively simple task for Head End systems to direct meter data to multiple endpoints (third parties). By making such changes new market entrants bringing

innovation could be accommodated."

AND

Extract from EDMI answer to Q2 - *"EDMI as a technology provider will contain its view to the Head End systems and metering technology. More regular data obviously requires more frequent cloud compute cycles within the Head End, hence a slight increase in costs*. *Estimated costs are projected to be in <u>cents not dollars</u> per month per meter point."*

Question 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?

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?

c) Are additional obligations on retailers required to enable the provision of real-time data access to consumers?

Rheem / CET response:

Response to Q4 a)

For meter replacement or retrofits:
Third-party service providers that may utilise RTD, such as Solar Installers, HEMs, and Battery suppliers, often work on tighter installation time frames than 20 business days. The industry wants to ensure that existing installation time frames are not compromised and repeat visits (due to retailer delays) do not result from longer than required lead times or retailers missing meter upgrade obligations. We suggest that the industry is further consulted on the 20-business day timeframe and that suitable measures are implemented to ensure retailers meet the proposed time frame.

For meters that do not require an upgrade:
We do not believe that there should be any delay if a meter does not require an upgrade to provide data locally including RTD. As an accredited third party will no doubt only have access to the meter if authorised to do so by the consumer and the physical access will (to be determined) involve security measures such as PKI / certificates etc., then an accredited third party should be able to connect to a consumer's meter once the consumer authorises access. Such authorisation should be made accessible and easy to the consumer via for instance phone and online mechanisms put in place by the retailer or MSP or AEMO. The process needs to be easy, secure and transparent to ensure there are no delays and costs incurred in gaining access to the meter.

Determining meter capability to provide (local) access to data including RTD:
There should be a national database where a consumer or their authorised third party can lookup their current meter (e.g., by meter number) to determine its capability to provide data, including RTD or otherwise. This database could be hosted by the government like the Energy Made Easy Facility and use the MSATS database as the source for assessing the installed meter capability.

Access methodology requires surety for consumers and third parties:
In the directions (pages 24/25) paper AEMC states:

"Given existing technology, consumers would access real-time data directly from the smart meter under

our approach presently. However, we expect that remote access technology could improve over time and potentially allow for instantaneous delivery at low cost. Therefore, our proposed framework does not prescribe a specific form of access and gives industry the flexibility to decide the access method that best meets consumer needs in accordance with any real-time data requirements proposed under our approach."

The industry needs certainty regarding the technology and methodologies or locations used for accessing RTD. Additional options for accessing data, including real-time data, would always be welcomed, even by remote means. However, this should not result in a loss of local access or changes to access—whether local or remote—that compel the industry to rework product offerings, with unpredictable impacts on CER products, services, capital, operational, and maintenance costs.

Response to Q4 b)

Subject to our response to point a) above – NO. The industry needs certainty regarding time frames, as the installation and commissioning of the CER is likely dependent on access to the RTD at the meter.

Response to Q4 c)

YES:

1) Additional obligations should be imposed on retailers to ensure timeframes are met and that consumers and/or third parties do not incur costs when retailers fail to provide timely access for meter RTD. For further details, please refer to our answer to Q4 a) above.

2) Retailer contracts for energy supply should not permit conditions under which consumers must relinquish their rights to meter data, including RTD, and/or control of their CER as a prerequisite for receiving energy, products, or services. Authority over access to the consumer's meter data and CER must always remain with the consumer.

Question 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?

Rheem / CET response:

Response to Q5 a)

YES.

Note to AEMC Directions paper section 5.3.2. The Directions paper states that:

"Current real-time data solutions, including CTs and smart meter communication ports, only facilitate single party access to data."

While this may be true for some smart meters, those meters can be configured for multi-party access. A module can be attached to the meter's single access port, enabling multi-party connectivity, which includes options like WiFi and RS485. The module also supports connectivity to a modem (e.g., 4G/5G) for remote access to the meter. We've listed companies that provide such modules in our response to Question 1 a), including Influx Data (see www.influxdata.nz), which was recently acquired by an Australian MSP.

Modules available now to enable multi-party access:

A typical module that enables multi-party access from a meter serial access port can be found here:

https://cdn.sanity.io/files/06o4fcfm/production/1dbb3dce48ba2ba767bffc872f910f374bf3217c.pdf
and here:
https://cdn.sanity.io/files/06o4fcfm/production/9114733d788d44d269eb78b61da8d90114caf882.pdf

Interoperability considerations:
Noting also that we have detailed in our previous response to the Consultation Paper that most smart meters also support standardised communications protocols and formats as this is a requirement in other countries where the meters are sold. Hence there are virtually no technology related barriers to providing the same capability here which supports our comments in our response to Q1 that *"15 years is a very very long time in the technology space, smart meters that are being deployed now have capability to provide data including RTD."*

AEMO should utilise the existing meter software stacks of standardised protocols and protocol formats currently supported by smart meters in various countries. In fact, interoperability, as well as standardised protocols and formats, are publicly available for smart meters, as they are employed in embedded networks in Australia that require connections to HEMs, Building Management Systems, and Billing Systems when the meters are not On Market.

For example, here is a link to the Modbus (industry standard protocol) for an EDMI MK10 meter

https://www.aggsoft.com/serial-data-logger/tutorials/modbus-data-logging/edmi-atlas-mk10.htm

Modbus has become the global "go-to" interoperability protocol for communications with behind-the-meter CER resources. As Modbus is generally supported by smart meters, it makes sense to consider it the default standard for meter interoperability. Another contender is DLMS, which is natively supported by most smart meters.

Unfortunately, we are aware that some MSPs load new software with proprietary protocols into smart meters. However, these meters could be updated remotely (to restore interoperability) with direction from the AEMC through a rule change (changes to Schedule 7.5 of the NER) and updates to the metering regulatory framework and AEMO procedures.

The EU data Act:
Further, we agree that MSPs should be bound by the EU Data Act's interoperability provisions to support data access, including RTD.

Given the above, we strongly disagree with the statement in Clause 5.3.3 of the Directions paper from respondent stakeholders that:

"the development and adoption of interoperability standards could take several years to implement."

This is not the case.

Security:

Access security could be remotely added and updated/maintained via software updates to smart meters. A logical contender would be to use Public Key Encryption (PKI) as the basis for the security of access by accredited third parties to the meter, as Australia already has the frameworks and guidelines for PKI implementations. Independent bodies such as the Digital Transformation Agency and the Australia Signals Directorate are appropriate governance-bound agencies that could advise on security requirements for meter access.

Further the above approach would mean that access could easily be made two-way to enable third parties' control over embedded / attached CER that has been built into the meter – see below "Other obligations".

Other Obligations:

Providing RTD alone is not a consumer-centric solution, which is a stated aim of the Commission. As we detailed in our previous response, covering letter, and this response, the obligations for interoperability should not be limited to merely the provision of real-time data.

In our response to Question 1 d) we said that:

*"Having multiple third parties able to provide a range of CER products and services enabled by local access at the meter to RTD will create a market for innovation and competition resulting in new lower cost CER products and services that third parties can offer retailers as well as consumers. Currently retailers are also restricted in their choice of CER products and services due to constraints imposed by MSP control over the meter. We note that **RTD access is only one aspect of the meter that will deliver consumer benefits and that software and hardware for the control/monitoring of CER embedded in or attached to / controlled by the meter needs to be available as well on a commercially and technically neutral basis to the consumer / accredited third parties assigned by the consumer."***

Consumer-Centric Outcomes – Obligation for Access to Meter CER Capability:

A truly consumer-centric approach would mean that:

"The meter must be an enabler of CER products and services that stimulate innovation and competition and should not be a competitor to third parties. Beyond its primary purpose of settlement and billing, the meter shall provide data (locally and remotely) to all third parties (including MSPs) without favour, on a commercially and technically neutral basis, with the consumer as the consent authority for an accredited third party (including the MSP) to access and use their meter data, and access and use any CER controlled by the meter".

The meter should serve its purpose without competing with third-party products and services or creating a walled garden that locks in consumers.

However, if functionality beyond what is required for settlement and billing is to be retained and enhanced within the meter, a further obligation must be imposed on MSPs to achieve a truly consumer-centric outcome (as is the Commission's stated objective). This obligation should require that all meter control capabilities, associated meter data, and software that falls outside the regulated requirements for settlement and billing be made available to consumers and accredited third parties on a technically and commercially neutral basis, contingent upon the consumer's consent. This means that CER control capabilities, such as switching external relays via the meter, managing load channels for CER, controlling internal relays for solar PV (e.g., DNSP solar backstop), and using embedded communication features to oversee CERs connected to or near the meter at the home or site, should all be accessible (with both local and remote access) for consumers to assign.

As the capabilities of the meter currently lie solely with the MSP, we strongly disagree with the AEMC statement that:

"MSPs would not have a material competitive advantage"

We have further addressed our disagreement with the above statement elsewhere within our response.

> **Question 6: Which consumer consent pathway do you consider to be the most practical and why?**
>
> a) Are there any barriers to implementing this pathway?
>
> b) Are there any viable alternative pathways that better deliver outcomes for consumers?

Rheem / CET response:

Response to Q6 a)

We agree with the AEMC assessment that of the pathways considered the MSP-centred approach may be a more efficient pathway however please see our answer to Q6 b) for consideration of an alternate pathway. Whilst the MSP pathway appears attractive, if MSPs are allowed to expand their portfolio of non-settlement and billing related services in competition with third party service providers there are privacy and competition issues to consider, for example exposing the MSPs to which consumers have given which third parties consent. This information could be used for competitive strategies and targeted marketing via the MSPs, with the potential for anti-competitive behaviour.

Where the consent information will be stored (including third-party consent) and who has access should also be considered to ensure there are no competition-related issues.

Response to Q6 b)

At present, nearly all new CER installations in the market necessitate some form of additional metering due to the lack of local access to the smart meter. The various providers of CER services (OEMs, Installers, Aggregators, HEMs Providers, and Providers of CSIP-AUS Dynamic Connection Compliance Systems) possess differing levels of access to monitor and record consumer power usage parameters such as kW, kWh, and time, both for the NMI and at the individual CER device level. This information is retained in databases in Australia and worldwide, including in countries that do not adhere to our privacy act or have similar privacy regulations.

Generally, the consumer must sign some form of a "data services agreement" consent form which vary greatly in their content and enforceability and may be biased to the OEM at the expense of consumer privacy.

It is perhaps worth considering a pathway that operates independently of the retailers and MSPs. AEMO may be a contender here, as we would need a certificate authority for accredited third parties if PKI is adopted for meter access. Once the third party has consent and attempts to access the meter, the process of accessing the meter could then be automated; the certificate credentials could be authorised by a remote connection to a server run by AEMO. It would be sensible to consider the consent mechanism and meter access alongside current discussions on harmonising CSIP-AUS across DNSPs, as well as having a common consent authorisation mechanism for the DNSP DERMS servers (from the certified site CSIP-AUS client) and the meter. Additionally, many of the third parties will be common across metering and CSIP-AUS. Therefore, given the synergies between the two requirements, it makes sense to explore a common framework.

Whilst not in scope of this directions paper it does highlight that whatever pathway is chosen consideration should be given to capturing the above situations under a common consent process or at least ensure that rules and obligations on third parties seeking consent for access to meter data and CER data (including third party metering) are harmonised.

Question 7: What should third party access consent look like?

a) Should the form of consent be left to third parties to determine?

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?

c) Should the process for the withdrawal of consent also be specified?

Rheem / CET response:

Response to Q7 a)

No. The form of consent needs to be harmonised across third parties to protect consumers and ensure a level of legal enforceability.

Response to Q7 b)

YES. If no template exists, then an industry working group should be convened to determine the specifications and finalise a draft consent form for consideration. Again, as per our response to Q6 b) there are similar consumer consent and privacy issues associated with DNSP dynamic connections and as many of the third parties will be common across metering and CSIP-AUS it makes sense to explore a common framework of consent on third parties that request access to consumer data.

Response to Q7 b)

YES

Question 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?

b) Are there any other safeguards required to ensure third parties do not misuse data?

Rheem / CET response:

Response to Q8 a)

Yes, third parties should be accredited by AEMO.

Response to Q8 b)

Yes. We refer to our Q6 answers on consent pathways and our recommendation that required consent processes for DNSP dynamic connections using CSIP-AUS should be leveraged and, where possible, harmonised to use the same processes for accreditation and consent for third parties seeking access to the consumer's meter data. As all third parties will require access to meter data, including RTD for DNSP CSIP-AUS compliance services, it makes sense to explore common processes for consent and accreditation. We also consider that the Directions Paper "Box 7. CDR Accreditation Criteria" is a good template / starting point for other safeguards against the misuse of consumer data.

> **Question 9: What features of the consumer data right (CDR) can we adopt?**
>
> a) What specific features of the CDR would be beneficial to apply to third parties who seek access to real-time data?

Rheem / CET response:

Response to Q9 a)

As detailed above in our answer to Q8 b) we consider that the Directions Paper "Box 7. CDR Accreditation Criteria" is a good template / starting point for other safeguards against the misuse of consumer data.