EDMI Consultation paper real time data

Question 1: What are the benefits of improving access to real-time data? a) What are the anticipated use cases of real-time data? b) What is the value of the benefits that flow to consumers?

Most importantly, this is an enabling technology, as market requirements evolve and innovation comes to market more data delivered faster becomes the underpinning foundation. At the very least technologies will need to measure, seek data from third parties, calculate and act well within 5 min pricing periods to deliver consumer benefits, and that's based on what we know today. Keeping in mind the metering hardware being installed currently is expected to have a life well beyond 15 years.

There are multiple reasons why sub 5 min data is critical for the market:

- Increased consumer engagement
- Dynamic pricing
- System minimum load response
- Household load shaping
- System restarts
- Load limiting & shaping

Question 2: What are the costs of improving access to real-time data? a) What are the types of costs that would be incurred to improve access? b) What is the magnitude of these costs? c) Who would incur these costs? d) Do the benefits of improving access to real time data outweigh the costs?

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 withing the Head End, hence a slight increase in costs. Estimated costs are projected to be in cents not dollars per month per meter point.

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. This

approach reduces the average hardware cost and those that require additional functionality cover the extra cost.

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

Question 3: Do metering parties currently have a competitive advantage? a) Do you agree with the proponent that metering parties have a competitive advantage in providing services not related to their core functions of settlement, billing and maintenance? b) How would any competitive advantage impact the costs of new energy services to consumers?

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.

Question 4: Do DNSPs need more than PQD to improve network planning and operation? a) Do the benefits of improving DNSP access to real-time data outweigh the costs? b) What are the use cases for DNSPs and other network planners to have access to real-time data other than advanced PQD? iii Australian Energy Market Commission Consultation paper Real-time data 10 October 2024

EDMI is not in a position to comment on the needs of DNSPs

Yes, most installed meters across the region are already reading PQD and are ready to deliver such data if they aren't already, as mentioned in the previous question, it is a simple exercise to deliver data channels or whole load surveys to third parties direct from Head End systems.

It is already possible for field staff to view live (sub 5 second) meter data, EDMI imagine this would be a value adding tool for the DNSP's.

Question 5: Who should have a right to real-time data in the NER? a) Should consumers, their authorised representatives or any other party, including DNSPs, have a right to access real-time data?

Ideally all secure parties that can assist in cost reduction technologies, although privacy issues will need to be addressed. It's perhaps worth keeping in mind that meter data is stripped of consumer data/identity.

Note, it is a relatively easy exercise to deliver all or bespoke data channels to multiple parties

Question 6: How should real-time data be defined? a) Do stakeholders agree with the proposed definition of real-time data and customer power data? b) What should be defined and/or further expanded in AEMO procedures? c) Should data be validated or not?

Real-time should, at a minimum, be defined as the ability to act upon signals within a 5 min interval. Live (sub 5 second) data is already available from the current installed fleet, once initiated the system can be configured to time out in order to minimize telco costs.

EDMI agrees, data should be validated.

Question 7: How should real-time data be accessed and shared? a) Do parties, other than metering service providers, need to locally connect directly to the meter to access real-time data? If so, what changes are needed to enable this? b) Are there alternative data sharing arrangements that should be enabled by a rule change, if made?

New generations of meters (due for delivery 2025) natively bring local connectivity in the form of long-range blue tooth that can connected to householder equipment such as solar inverters, EV chargers and client Applications. Clearly local connectivity does not incur telco costs. In addition, pods are 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.

Question 8: Who should bear the costs of accessing real-time data? a) Should all consumers bear the cost of accessing real-time data? b) What would be the benefits of a dispute resolution framework and how should it operate?

Consumer cost savings will far outweigh the cost, costs could be absorbed within the savings.

Question 9: What changes would be required to ensure interoperability? a) Would changes to the minimum services specification requirements be the most effective way to ensure interoperability of real-time data? b) Would any other changes be required to facilitate interoperability, for example, changes through device standards?

From a meter perspective, the use of native blue tooth and the ability to add communications pods such as Wi-Fi will allow connectivity to household CER. Clearly a number of protocols are used across the industry, each can be accommodated within a hot swapable pod. Consideration has been given to allowing third parties to design pods for specific or bespoke integrations. This approach covers the majority of use cases and retains the metering hardware on the wall along with the secure communications path already in use by Meter Service Providers.

Changing service specification may have an adverse effect on innovation.

Question 10: Do existing arrangements sufficiently protect consumer privacy and maintain cyber security for any real-time data framework? a) Would any additional consumer privacy and cyber security protections be required if a real-time data framework were implemented? b) Do you consider other work programs could provide any additional protection required, such as the Roadmap for CER Cyber Security?

Cyber Security is an ongoing concern, with solar inverters and EV chargers often being connected to overseas servers a threat vector exists and is easily exploited. EDMI considers such CER devices should be isolated from the grid via a meter contactor. The control infrastructure is in use today to read over 4,000,000 meters daily. Such a solution would provide a 'Utility Grade' defense mechanism to identify and defend against such threats.

To address consumer data protection concerns the Head End data is anonymous in nature as it contains no specific customer details.