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Project Team
CER Data Exchange
Australian Energy Market Operator

Via email: cerdataexchange@aemo.gov.au

Dear Project Team,

Submission - CER Data Exchange Industry Co-Design Consultation Paper

Thank you for the opportunity to comment on the Australian Energy Market Operator's (AEMO) CER Data Exchange Industry Co-Design Consultation Paper.

Summary

The networks (CitiPower, Powercor and United Energy) support the transition to a low carbon future. Central to this is consumer energy resources (CER) being integrated into networks efficiently and effectively. This must be achieved in ways that enable those customers investing in CER to derive the best value from their investments, and those without CER, receiving their 'share' of the benefits arising from the energy transition.

The reliable, efficient and secure exchange of CER-related data between different market participants is an important prerequisite. The networks support efforts to streamline processes, remove bottlenecks and increase data access and transparency where it can reduce costs or create value for customers.

The networks therefore:

- support the creation of a shared industry data platform that is secure, extensible and scalable to support the long-term information exchange needs of market participants
- the CER data exchange platform is for business-to-business data exchange and not operational control for network management or system security purposes
- the CER data exchange platform should be 'an enabler rather than a controller'. The purpose of a data exchange platform should be to provide a common framework for authorised parties to access and exchange data with one another in a secure and efficient way, not to perform operations on the data that passes through it

As it is customers who will ultimately bear the cost of any investment in the development of a CER data exchange capabilities by AEMO, networks, retailers, aggregators or other market participants, no such investments should be made unless there is high confidence that they will return net positive value to customers. To this end, the immediate focus must be on identifying use cases that solve actual problems that are impacting negatively on customers today.

Should you have further queries, please contact Tennille Pownceby, Customer and Market Compliance Manager on 0472 777 217 or at tpownceby@powercor.com.au.

Yours sincerely,

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Response to Consultation paper questions

Question 1: Priority Use Cases - Do the identified priority use cases effectively address immediate data-sharing needs, and are there any additional use cases you would recommend prioritising?

The network limits and CER standing data are useful use cases. It is important to note that the network limits use case should be defined at down to the distribution low voltage level network. Further, the data to support the network limits use case is not presently stored/managed by the networks.

While there is a defined national standard for the communication of DOEs for operational management of customer dynamic connections and emergency backstops (CSIP-AUS), we note that the CDX use-case would likely involve different or additional data (e.g. forecasts of future DOEs). Further work would be required to clearly define these business-to-business DOE data sets and their service level requirements before this use-case could be progressed, and the networks would need to develop the internal systems and processes to prepare and publish the new data. The third use case (supporting local network services) prioritised is not a driver for our networks. The market for local services is very immature. We are trialling PICLO Flex with the view that a combination of a procurement platform and distributed energy resource management system (DERMS) would be used to manage local network services contracts. We do not see the CER Data Exchange providing that capability.

Question 2: Strategic Use Cases - How do you view the long-term value of the strategic use cases and are there specific outcomes you would like these use cases to achieve in the future? Also do the strategic use cases sufficiently complement the priority use cases? Do you have any feedback on when these use cases should be implemented?

Several of the use cases are beneficial, but others are of limited or of no value.

For example, we have no immediate plans to implement dynamic network pricing. There would need to be a change to the National Electricity Rules (NER) before such a capability would be required.

The grid data collaboration has some merit for long-term planning. However operational data (such as aggregate operating envelopes at TSO/DNO inter-connects) will not use the CER Data Exchange, but rather utilise existing operational (e.g. SCADA) systems that are already connected and sharing data.

Question 3: Additional Use Cases - Are there additional or alternative use cases that would enhance the CER Data Exchange's outcomes?

Current market systems mechanisms are limited and consequently, each network individually transacts with each retailer. There is an opportunity to standardise billing information and use the CER Data Exchange as the common infrastructure to support the billing data transfer between retailers and networks.

The Consultation Paper references several suggestions from the Clean Energy Council (CEC). We would caution that the CER Data Exchange is not used as solution for every issue in the industry. There are other alternate solutions to the issues raised by the CEC.

Question 4: Changes to Use Cases - Would you suggest any changes to the use cases presented? Please outline your reasoning.

The local network services use case should be removed or deprioritised. Dynamic pricing should also be deprioritised. Both the sharing network limits, and grid data collaboration use cases require clearer definition and commitment to standardisation of data sets before they will be meaningful use cases.

The current DER Register is well understood, and its limitations equally understood. The ideal use case for CER Data Exchange is to make the CER Standing Data item the 'next generation' of DER Register by

capturing new CER such as vehicle to grid, Home Energy Management Systems (HEMS) and whether a CER is price sensitive or not. The data sets are known hence the focus can be on utilising the CER Data Exchange capability to support new but vital use cases like cyber security by capturing extra information such as device firmware versions or monitoring for when an aggregator risk profile in the NEM has changed due to reaching a certain size across jurisdictions. This will be easier than use cases like sharing network limits where the data sets are not well defined or standardised across networks.

Question 5: Prioritisation - Do you agree with industry preference that the CER Data Exchange should be designed with narrow capability initially but have the flexibility to expand in the future?

There is an enormous amount of change being implemented across market-based systems either due to NER changes (e.g. metering contestability and flexible trading arrangements) or technology obsolescence (Market Interface Technology Enhancements (MITE)). For networks to deliver an efficient and effective separate CER Data Exchange, the scope would need to be very specific and detailed with a clear understanding of customer value. Having an architecture and roadmap to show how it could be used for other use cases is also required.

Question 6: Capability - Do the proposed data sharing capability discussed above support both current and future CER data sharing use cases? Please nominate what essential data sharing capability would be required?

The data sharing principles (Information Security, Format Standardisation, Data Governance, Access Management, Platform Interoperability, Advanced Data Validation, Custom Data Formats, Batch vs. Real-Time Processing) are all valid and important. They are all required to ensure the use cases are deliverable.

Since networks are required to invest in MITE, there should be a clear roadmap path that demonstrates how use cases from the market (MITE) migrate over time to the CER Data Exchange, or that the use cases in the CER Data Exchange migrate or co-exist with MITE.

Question 7: Additional Features - What additional features or capabilities could improve flexibility and scalability in the CER Data Exchange?

A key element is the standardisation of the solution. For example, if a network had an 'agent' for connectivity to the CER Data Exchange, it will greatly simplify integration with other network systems and processes.

We take data ownership, privacy and security seriously. This means we will always wish to manage data sets we have responsibility for. This includes how that data is made available on the CER Data Exchange. Each new use case should involve the network determining the data set and who requires access to the data. The integration mechanisms (including security, identity management etc) should already be in place with the original 'agent' integration.

Question 8: Ownership Preferences - Which ownership model do you believe is best suited for the CER Data Exchange: Industry-led consortium, AEMO-led, or a New Independent Government Agency? Do you have feedback on the models in addition to those summarised in this paper? Are there other ownership models not listed in this paper that you would like us to consider?

An AEMO led CER Data Exchange is the simplest model and is consistent with how market systems operate today. The challenge with this model is it is slow, inflexible and expensive.

If the goal of the CER Data Exchange is to be nimble, allow fast implementation of use cases and be efficient, then each market participant needs to have 'skin in the game'. This would suggest an industry consortium, but it would require strong governance and oversight capability to make sure it is not dominated by only the largest market participants.

Question 9: Oversight – prescription vs discretion - What level of oversight should apply to the CER Data Exchange? Should its operation be heavily prescribed, or should it be provided with operational discretion?

The data on the CER data exchange can impact the operation of the National Electricity Market (NEM). As such, there needs to be a foundational set of capabilities and service levels which are prescriptive. However to ensure the flexibility of the CER data exchange, the opportunity to 'sandbox' or 'trial' new data sets and use cases needs to be built into the oversight model. Once the 'trial' is determined to be successful, it can then be rolled out more widely applying the foundational capabilities.

Question 10: Oversight body - Who should be responsible for overseeing the CER Data Exchange's operation? Are there other models of oversight that you would like considered? How important is regulatory independence in overseeing the CER Data Exchange, and would a new dedicated oversight agency or body better support transparent, impartial governance?

Any oversight body must be independent and be able to make decisions that are in the long-term interests of customers.

The industry is already heavily regulated by the Australian Energy Regulator (AER). It makes sense the AER takes on the oversight role given it will have a fundamental role in assessing business cases and allowing expenditure for the CER data exchange for market participants. Using the AER avoids the need for additional overheads and costs resulting from a further regulatory body being established.

Question 11: Data Governance Preference - Which data governance model best aligns with industry's desire for trust, compliance, and flexibility?

An industry collaboration model will be the fastest and simplest way to determine what is needed and engender trust, compliance and flexibility amongst market participants. Users of the CER Data Exchange should be required to sign on to a requirement to be part of the collaboration model and support its use.

Question 12: Adaptability - In your view, how should the data governance model support the integration of new use cases as CER technologies and industry demands evolve?

An industry collaboration model will allow market participants to table new use cases. The benefit is that those that need, or see value in, the use case will be part of the decision-making process.

Question 13: Stakeholder Engagement - How frequently and in what format should the data governance framework engage stakeholders on changes to standards, compliance requirements, or new use cases?

It is too early to determine this.

Question 14: Data Quality - Whilst not included in the scope of the CER Data Exchange, do you have feedback or key considerations for ensuring data quality in a manner which compliments the Exchange?

There are two parts to data quality – the first is the source of the data. In the case of data from a network, we are responsible for data quality. The second is the CER data exchange itself in terms of data validation and any transposition of data. The second item is managed by the data governance framework.

With respect to network data, there needs to be recognition and acknowledgment by all market participants and CER Data Exchange users of its limitations. It is understood some market participants will be seeking to make large investments or trades based on that network data. The data will however be imperfect. As a result there is need for clear guidelines on the limitations of the data users may access from the CER Data Exchange and immunity from litigation for those market participants populating the CER Data Exchanges.

The same is true for privacy considerations. To the extent that networks are required to populate the CER Data Exchange with data that might otherwise be considered private, the networks be provided immunity should that data be accessed and used in appropriately by another market participant.

Question 15: Alternative Preferences - Are there any data governance models not listed in this paper that you would like us to consider?

No.

Question 16: Phased Implementation Roadmap - Do you agree with the proposed phased approach for the CER Data Exchange implementation? What adjustments or considerations would you suggest to better align the phases with the needs of your organisation?

We support a phased approach to implementation, if the first use cases allow for the proper integration /implementation of the CER Data Exchange.

The challenge for our networks is timing. The next 5 years is heavily scheduled with work associated with NER changes, AEMO's post 2025 roadmap, and internal technology refresh programs. We are also embarking on journey of active management of low voltage (LV) networks through emergency backstop provisions and the introduction of flexible contract connections (dynamic operating envelopes).

It's also important to note that the technology concepts in the CER Data Exchange are not currently used in our networks. This will require significant ramp up of new staff /skills and potentially IT infrastructure. Many of these staff and skills are already in short supply with the industry paying considerably above the odds to access this expertise. An accelerated implementation of the CER Data Exchange would exacerbate this problem.

As noted earlier, the cost of the energy transition and in particular system enhancements, continue to mount. These costs are not incurred by market participants but ultimately customers. Whilst many of these system enhancements are allegedly supported by large benefit cases prepared by the AEMC, the feedback we have heard over and over from our customers, is that these benefits are not accruing to them. It remains unclear where the billions in proposed benefits are accruing, but until such time those beneficiaries are identified, we would urge caution in heaping further costs on the industry and customers through an accelerated roll out of the CER Data Exchange.

Question 17: Cost Recovery Model Preferences - What are your preferences regarding cost recovery for the CER Data Exchange? Would a direct, shared, or government-supported model be preferred, and why?

As regulated networks, any costs associated CER Data Exchange must be demonstrated to have long term value to customers in the view of the AER to enable the costs to be recoverable either through the regulatory reset process or as a cost pass through. The simplest approach for our networks for cost recovery would be clear a NER change mandating that we must use the CER Data Exchange.

Noting that AEMO and industry have already committed more than $100 million to the IDX/IDAM program, this program should be leveraged as far as possible in developing the pathway to the future CER data exchange. Architectural choices made for IDX/IDAM should be compatible with the long-term target architecture for CER data exchange for the sector. This would lower the costs needing to be recovered from customers.

Regulatory and policy reforms in the energy sector should be looked at holistically. The current process is driving up costs through skill shortages, insufficient timeframes and lack of integration. It is also being developed based on benefit cases that are unrealistic, and do not match the timeframe in which costs are being incurred creating long term generational inequities.

Question 18: Regulatory and Policy Reforms - Which areas of policy or regulatory reform do you believe are most critical to support the CER Data Exchange? How should these reforms balance compliance with operational flexibility?

We have similar comments to question 17.

Question 19: Technical and Operational Challenges - What technical or operational challenges do you foresee in integrating your systems with the CER Data Exchange? Are there specific support mechanisms that would facilitate smoother adoption for your organisation?

It will depend on both the architecture of the CER Data Exchange and the data sets associated with the use cases. We currently have a corporate message bus, and in theory the integration will occur between it and the CER Data Exchange. However existing systems, like the DER Register, are implemented differently and so if it was to be kept, but use the CER Data Exchange, it would require a specific integration. We are currently on a journey to move more applications into cloud-based environments. Assuming the CER Data Exchange is cloud hosted, we would need to improve our capability to host the agent, or integration instance in that environment and back into our corporate legacy systems.

As referred to in previous answers, there are several hurdles that need to be overcome for our networks to use the CER Data Exchange. They include:

- The data sets (e.g. forecast DOE) will need to be created first so there is something to transact
- Resource /skills associated with digital services exchange technologies are currently not in our organisation and may lead to resource strain across the industry and skill shortages (e.g. requiring additional specialist headcount)
- The next 5 years IT schedule is already full with NER change modifications, MITE and requirements around Emergency Backstop / Flexibility Services
- Upholding customer data privacy, minimising the threat of cyber security and ensuring FIRB compliance.

Question 20: Impact on Stakeholders - What technical, regulatory, operational, or commercial impacts would you anticipate from implementing the CER Data Exchange in your organisation, and how could the roadmap or cost recovery model alleviate these impacts?

The CER Data Exchange needs to have a clear customer benefits case. As regulated networks, this work would only proceed if mandated or we can demonstrate to the AER that it is in the long-term customers' interests. Cost recovery for the integration and on-going support would have to be via the regulatory reset or pass through process.