

21 November 2024

Australian Energy Market Operator (AEMO)
Via email: cerdataexchange@aemo.com.au

To whom it may concern,

Submission - CER Data Exchange Industry Co-design Project Consultation Paper

The Centre for New Energy Technologies Ltd, ("C4NET") is pleased to be able to contribute to the feedback sought on the recently released consultation paper.

The C4NET was established as an initiative of the Victorian Government to drive collaboration between universities, industry and government to solve the energy sector's complex challenges as it moves through the transition upon it. AEMO supported the development of C4NET and agreed a Memorandum of Understanding with the Centre on its inauguration in 2018.

C4NET's focus areas, as approved by its independent Board, include the challenges and opportunities, relating to:

- Improve electricity data access and usage to foster new product & venture development; drive consumer engagement; better inform energy advice to consumers, regulators and policy makers; drive efficiency in data provisioning; and unlock the value of data sets to enrich information.
- Accelerating the deployment of new energy technologies by piloting innovative new energy technology projects that help resolve the industry's challenges, supported by high quality university researchers

C4NET commends AEMO and its advisors for the process undertaken to date on what is an ambitious but important development for the sector. Particularly pleasing was to see that this initiative in part arose from findings of experts through the conduct of the EDGE project. The experts involved in Edge deeply considered such matters and were well placed to make strong recommendations as to how to overcome barriers to deeper CER integration. It is pleasing to see such recommendations supported further.

We believe that a well-conceived and executed CER data exchange mechanism is a valuable tool in progressing CER uptake, and in doing so increasing consumer agency and the adoption of assets that assist rapid movement towards net zero.

We have addressed select questions raised in the consultation paper in the appendix to this letter.

We look forward to seeing the next steps and are willing to assist where we can. We have worked at the forefront of CER data and understand the challenges well, but also see plenty of opportunity for the sector to address efficiently.

Your sincerely,



James Seymour
CEO

Appendix – Responses to select consultation paper questions.

Questions 1-4 Priority Use Cases

Each of the priority use cases have merit and are reasonably well matched to the objectives of the use case selection.

A note of concern is relating to Priority Use Case 2 (Supporting Local Network Services) is that while this will almost certainly be needed at some stage, the ability to actually act on the data is limited in that the market mechanisms for aggregators, VPP operators and similar is limited. In saying that, we note that it is difficult to develop effective market mechanisms without the data exchange mechanism in place, so at some point this must be delivered regardless. The only question for us is whether it should be a priority case to demonstrate the value of the exchange where we want to see quick wins as a foundation for further growth.

An additional use case for consideration is the transfer of solar generation and battery SoC data. This is currently a blind spot in the full picture of electricity use and demand shift potential. Data is readily available in devices adjacent to the meter, albeit not of NMI compliance. The data is useful for consumers and their advisors (such as their authorised agents or retailers) to understand their total position. While such data may be available to them via the user interface/device apps, a standardised format may help the provision of advice. The bigger benefit would be to networks and system operators to informing the actual use on each network type and informing the potential of mechanisms to assist both congestion and long-term infrastructure needs. Similar could be said for EV battery connection and domestic hot water systems that could be paired with solar PV generation, but it is recognised the EV market is still top mature and the penetration of monitoring devices or in-built controls are not yet common in hot water heaters.

Question 5 – Prioritisation

We agree that the CER Data Exchange should be designed with a narrow capability initially but have the flexibility to expand. While there is inherent future uncertainty, the types of CER devices and how they are likely to be used are sufficiently informed that future data architecture can be reasonably informed now, and that any system need be adaptable enough to potential changes. A minimum viable product approach combined with a data structure architecture should provide the best balance of not over-designing upfront and having flexibility for expanding to further applications.

Question 8 – Ownership Preferences

The AEMO-led model is our preferred approach. The key reasons behind this are that it is best aligned with centralising data exchange mechanisms and builds on AEMO's capabilities in managing the market settlement data and consistency with other data initiatives, while avoiding the need to set up a new body. It is noted that there should be an assessment of AEMO's capability in managing innovation – if there are any capability gaps the model can still be developed with AEMO owning it while being open to alternate means of addressing execution and operation challenges. Lessons learned from the current exchange ownership models which seem to have served us well in the past may be informative.

Question 11 – Data Governance

We believe the Exchange Operator as Data Governance Authority would be the simplest first approach, with a periodic review process so if gaps persist an alternate model can be adopted. The Exchange Operator option would be aided by having an industry advisory group to guide. Trying to build in an additional group adds complexity to address an issue that may not exist.

Question 14 – Data Quality

There should be an assigned “custodian” of each data element by role, and they should be the party responsible for the integrity and accuracy of that data over time while they remain in that role. An example in use today is the “meter data provider” for meter data – who this is depends on individual circumstances, but the role’s responsibility can be clearly articulated. Where possible, the allocation of role should align to commercial interests of providing the service to the customer/site/device. The principle behind this is to align the obligation with those with the means (authorised access to the data) and the incentive to get it right to best serve the customer’s needs.

Where possible, it is better for the exchange itself not to have to enforce compliance other than set format. This enables the exchange to focus on efficient transfer between authorised parties alone.

Question 17 – Cost Recovery Model Preferences

There are a range of cost models that could be implemented, but we recommend focus first on the guiding principles as you suggest.

We recommend bringing in a development horizon so cost basis can adapt to recognise initial vs operational and ongoing development costs. Principally we suggest the inclusion of:

- Overtime, the exchange should be cost recovered from users
- Consideration should be given to the upfront cost of development of each solution – to balance first requestors not bearing costs that others get a free ride on, but also having some upfront contributions to ensure any development has an established market need.
- Tiering of costs should be considered so that occasional users, researchers, and new entrants can participate at low cost, but that once a certain threshold is reached a higher contribution to costs is made.

Other

Frequency of Transmission – the exchange design should consider different use needs such as regular push of pooled data (in a similar manner to how a smart meter in Victoria transfers data each night), a push of event triggered data, a pull of data that could be triggered by an event or user need, and data that is only available under certain circumstances. Such bucket arrangements help avoid over-transmitting data and allow for different cost-recovery mechanisms to be established on a use-by-use basis.