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Australian Energy Market Operator (AEMO) and  
Energy Networks Australia (ENA)

**Submitted by email:** [info@energynetworks.com.au](mailto:info@energynetworks.com.au)

CSR welcomes the opportunity to further comment on the ***Open Energy Networks - consultation on how best to transition to a two-way grid that allows better integration of Distributed Energy Resources (DER) for the benefit of all customers, 15 June 2018 (OEN).***

CSR is a leading building products company in Australia and New Zealand which manufactures and supplies products including Gyprock™ plasterboard, Bradford™ insulation, Cemintel™ fibre cement, Monier™ roof tiles, PGH™ Bricks, AFS™ walling systems and Viridian™ glass.

CSR employs approximately 3,500 people across all states and territories. It manufactures or processes product in every state and territory. On the east coast the company purchases over 6 GJ of gas per annum and 300 GWh per annum of electricity. In addition, CSR has an effective interest in the Tomago Aluminium smelter of 25.2%. CSR has taken several steps to actively reduce its costs including an increased exposure to both the wholesale electricity and gas markets and investments in a number of energy improvement projects such as on-site solar PV, energy storage and improved heat-recovery.

CSR expanded the building products business in 2011 to form Bradford Energy in recognition of the distributed energy network potential in the residential and industrial sectors. As one of the founding signatures of the Clean Energy Council's Approved Retailer Code of Conduct, Bradford Energy has a long-standing industry reputation as an innovative contributor to the renewable energy industry. As part of our initiative to empower Australians, we established a strong partnership with Tesla Energy to introduce Powerwall battery technology into Australian homes to transform the way in which Australians consume and store energy.

With the experience in distributed energy storage, CSR is looking further at implementing solar generation systems and battery storage across a number of its factories in Sydney to become an embedded network generator to provide local network support and AEMO services via the wholesale and ancillary services markets.

We welcome the opportunity to provide input into the OEN and become part of further consultation on how DER can be better integrated and utilised to reduce energy cost for all consumers.

**Affordable energy prices for local manufacturing jobs by avoiding unnecessary network investments - Lowest cost should be a top three priority**

In the last four years, CSR Building Products national energy expenditure has increased by 50% to over \$100m. CSR is strongly impacted by energy and carbon policies, market structures and supply chargers. Electricity network charges comprise around 25% of these

costs due to previous policies that enabled inefficient over-investment in network capacity resulting in customers paying higher charges for the next 20 years.

It is important that as we transition into a more de-centralised, distributed energy economy that we avoid unnecessary network investment that will lead to further cost increases that place additional pressure on local manufacturing and local employment.

This was recognised by OEN in support of distributed energy resources and the “*potential benefit to be \$1.4 billion in avoid network investment*” and how this will result in lower electricity costs for consumers. This needs to be a top three key objectives in the next steps through the consultation process (noting that it is currently listed last of the 7 key principles).

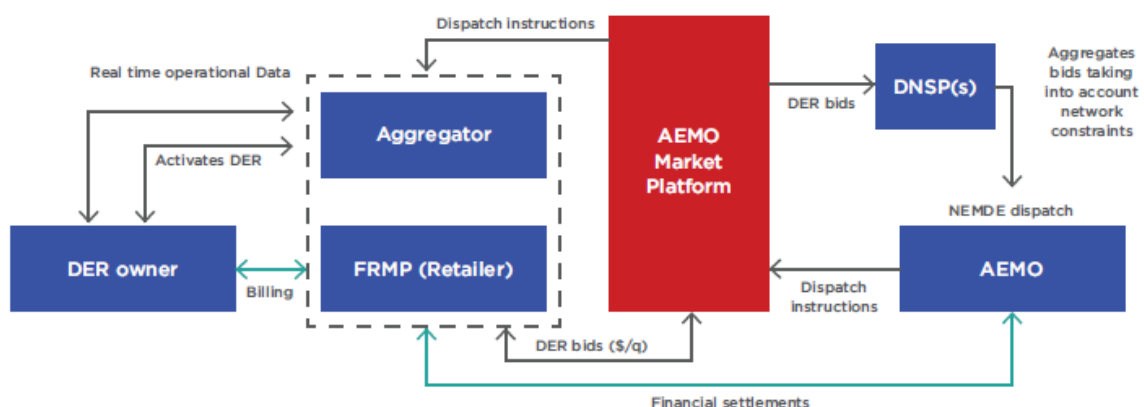
**Customers should have greater choice between multiple Aggregators and Retailers to provide DER service for the same connection point (NMI)**

To ensure that the active DER potential is maximised, customers should be able to choose between multiple Aggregators and Retailers to provide the DER service. This is consistent with the recommendation from the AEMC Reliability Frameworks Review, Final Report 26 July 2018, where CSR was a member Technical Working Group in support of demand response having a role in providing security and reliability in the National Electricity Market (NEM) at the lowest cost.

As the market for new DER services emerges, this will require IT and software integration with various platforms. It is important at an early stage to establish the open networks and protocols that will enable different DER platforms to communicate across the Distributed Management System and Market Platform. This will ensure that early adopters can invest with certainty that their technology will not become superseded or obsolete by incompatible communication protocols.

**CSR favours the Single AEMO Integrated Platform with direct market settlements to the Aggregator**

CSR is in favour of the Single Integrated Platform with AEMO’s central platform as shown in Figure 1 below. AEMO is already responsible for operating the market and has real-time management experience to maintain system reliability and security.



**Figure 1 AEMO Central Platform. Sourced from AEMO ENA OEN- Final June '18**

Another advantage with this model is that CSR, which operates sites across multiple regions will only have to register and integrate with AEMO systems once as opposed to liaising with each individual Distributed Network Service Provider (DNSP). Having recently registered in the AEMO gas market, we found that dealing with multiple gas distribution networks was the

most time-consuming and resource intensive part of the entire process due to the different requirements from each network.

CSR would like to see financial market settlements occur directly with the Aggregator rather than through the Retailer. This avoids added complexity and cost to the Retailer, which would then have to be passed back to the Aggregator.

Thank you for the opportunity to provide input on the OEN. Should you require clarification or further information, we would be happy to provide further consultation.

Yours Sincerely,

A handwritten signature in black ink, appearing to read "A Cheah". The signature is fluid and cursive, with a long horizontal stroke at the end.

**Andrew Cheah**  
**Energy Manager**  
**CSR Limited**