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Australian Energy Regulator GPO Box 520 Melbourne Vic 3001

By email: AERinquiry@aer.gov.au

Issues Paper – Customer Export Curtailment Value Methodology

CitiPower, Powercor and United Energy welcome the opportunity to respond to the Australian Energy Regulator's (AER) Issues Paper – Customer Export Curtailment (CECV) Methodology (the issues paper).

There are currently very few quantitative measures of customer value relevant to the various services electricity networks provide. Following the Australian Energy Market Commission's (AEMC) final determination on distributed energy resource (DER) integration, we recognise the importance of understanding and quantifying how customers value export services, as a tool to guide efficient expenditure.

The CECVs will be a critical input into our future DER investment planning, particularly as the CECV will drive the strength of any export service incentive scheme, the benefits case of proposed network investments to enable export services and the value of export tariffs.

We consider the AER's CECV methodology paper and process could be improved by:

- accounting for broader customer values, including customer value of choice and control, as well as customer value of environmental benefits in the CECV
- ensuring the methodology used to estimate the CECV is the most robust available measure, rather than the simplest, given the materiality of the impacts the value will have on the future of the energy market.

We recommend the AER publishes the draft CECV values along with its draft determination if possible, to allow for more meaningful engagement. We also recommend the AER conduct an industry workshop prior to the draft determination.

We expand on these suggestions below.

Should you have any queries please do not hesitate to contact Ellen Lukin on

Yours sincerely,



Megan Willcox Head of Regulatory Performance and Analysis CitiPower, Powercor and United Energy

We recommend a more holistic approach to quantifying customer value of export curtailment

The AER's issues paper outlines its proposed methodology to calculate CECVs to capture the wholesale market costs and benefits to customers, as measured by changes in generator dispatch costs of curtailing solar PV generation. We do not agree that the scope of the CECV should be limited to avoided dispatch costs. We recommend the AER take a more holistic approach to understanding and quantifying customer value of export curtailment by:

- incorporating the intrinsic customer value of choice and control of enabling exports
- incorporating the customer value of environmental benefits of enabling exports

The AER's proposed methodology focuses on only quantifying the direct tangible costs of export curtailment in terms of wholesale market impacts. While the intangible costs to consumers of export curtailment are more difficult to measure, that does not mean they, and therefore customer expectations held when investing in DER, should be discounted altogether. Customers purchase solar panels and batteries for many reasons, including customer empowerment and environmental factors, as well as financial value.

We are concerned that not factoring intangible benefits into the calculation will result in undervaluation of customer value leading to inefficient investment outcomes, particularly as the CECV will drive the strength of any export service incentive scheme, the benefits case of proposed network investments to enable export services and the value of export tariffs (which should be established by capping the long run marginal cost at the CECV to ensure export charges are no more than the customer value of export, given at that point, customers would prefer exports to be curtailed).

The risk of distorting investment decisions will grow if the differential in wholesale market values falls to near-zero over time, resulting in nil CECV value. We have observed this trend in the feed in tariff value. This outcome would be contrary to the objectives of empowering customers in relation to their energy choices, including customer desire to ensure cleaner energy sources.

The omission of intangible costs is also inconsistent with the AER's approach to the customer value of reliability (VCR). The VCR methodology includes both indirect costs (loss of business revenue and productivity) and intangible costs (reduction in convenience, comfort, safety, and amenity). The VCR methodology includes significant customer engagement which is a critical foundation of understanding customer value.

We are undertaking research to understand and quantify customer value

We have engaged external consultants, The NTF Group, to undertake a customer values project, aimed at assisting our understanding of customer willingness to pay on a range of service improvements.

Understanding and recognising how different types of customers value the services we provide today, or may provide in the future, is important to better understand the competing tensions of delivery and affordability and help shape the future of the services we provide.

NTF Group completed three phases of research, including two rounds of quantitative customer surveys to conduct contingent valuation and choice modelling to estimate customer value on a range of topics, including customer value (dollar per kWh) for **solar export flexibility** and customer value (dollar per tonne reduction in CO2 emissions) of **environment**.

If the AER extended the scope of the CECV to include broader customer values, we believe there would be merit in exploring the differences in value of export curtailment between DER and non-DER customers and residential verse non-residential.

Alternatively, if the AER does not factor broader customer values into the CECV, we urge the AER to explicitly state that it will allow networks to add broader customer values into the benefits case for proposed investments and incentives schemes relating to export services. Broader customer values should be accepted where customers can be shown to value choice and/or value environmental benefits, and this value can be robustly quantified by the distributor. This supports the role of customer engagement and customer-centric decision making, consistent with the spirit of the AER's Better Resets Handbook.