17 December 2021

Dr Kris Funston
Executive General Manager, Network Regulation
Australian Energy Regulator (AER)
GPO Box 520
Melbourne VIC 3001

Via email: Kris.Funston@aer.gov.au

Dear Kris

RE: Customer export curtailment value methodology

We welcome the opportunity to comment on the customer export curtailment value (CECV) methodology issues paper.

Customer interest in and expenditure on DER and therefore exports is growing and developing an appropriate CECV methodology is important not least as it will help:

- ensure efficient levels of investment for export; and

- serve as an important input into network planning, investment and incentive arrangements for export services.

Our response to each of the questions raised in the AER's issues paper is in Attachment 1 (attached).

We look forward to working with the AER on this issue. If you have any questions regarding our response, please contact Ian McNicol by email on ▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮

Yours sincerely
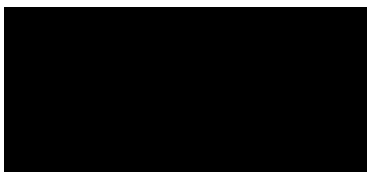
Charlotte Eddy
General Manager, Regulatory Strategy and Policy
AusNet Services

AUSNET: RESPONSE TO CUSTOMER EXPORT CURTAILMENT VALUE ISSUES PAPER

Q1: Do you agree with our interpretation of export curtailment in the context of calculating CECVs?

DNSP should not be required to identify instances of curtailment and estimate the impacts on specific customers. Rather, curtailment should be considered a scenario where a lower level of DER export occurs relative to an expected level. Appropriately defining those scenarios will, therefore, be a key challenge of the CECV methodology.

The input assumptions used to calculate CECVs need to be credible. While AEMO sourced assumptions, such as those provided in the Integrated System Plan, could be used, DNSPs should have the flexibility to select the input assumptions they consider most appropriate. The default position should be that those inputs are deemed reasonable unless demonstrated to be otherwise.

With respect to providing the AER with data on the level of DER exports on our network, subject to the nature, size and timing of its request (together with any other information requests we may be addressing) we should be able to provide the requested information.

Q2: Which value streams should be captured in the CECV?

The value streams outlined in the draft guidance note and summarised in the issues paper are reasonable. We have not identified any additional value streams for use in estimating the CECV at this time. However, additional value streams may be identified and there should be sufficient flexibility built into any estimating process to allow amendments.

Q3: Should CECVs reflect the detriment to all customers from the curtailment of DER exports, or particular types of customers?

CECVs should reflect the detriment to all customers from the curtailment of DER exports. While DER customers are most impacted by export curtailment in the short term, over the long term all customers are adversely impacted (through higher than otherwise possible wholesale prices).

Q4: How should CECVs be expressed?

We are comfortable with CECVs being expressed as $ per MWh of curtailed solar PV generation. Expressing CECVs in this way is consistent with the approach used for the Value of Customer Reliability (VCR) and the wholesale concept of Value of Lost Load (VoLL).

Q5: Do you agree with our overall interpretation of CECV?

We agree that estimating CECVs will be a complex process, and like any other forecasting exercise, there is likely to be a level of error in any estimates.

We also agree with the AER's overall interpretation of CECVs and consider that:

- Comparing scenarios where more/less DER exports occur and estimating the benefits/costs to customers under those scenarios is reasonable
- The CECV methodology will capture the additional wholesale market costs due to DER export curtailment, as the AER can use market information to independently estimate these costs. However, DNSPs will be permitted to estimate other costs and benefits in their investment proposals, which may be specific to their proposed investments.
- Value represents the detriment to all customers from the curtailment of customer exports, or more generally the detriment to all customers from lower levels of customer exports. However, it may be possible to calculate CECVs for particular customer groups, such as DER customers and non-DER customers.
- CECVs can be expressed as $ per MWh of curtailed solar PV generation. To express CECVs in this manner, we could compare the total forecast volume of solar PV generation under

different scenarios, estimate the total additional costs faced by customers in the scenario where DER exports are lower, then convert this to a $ per MWh basis.

Q6: Should there be a more explicit link between CECVs and export tariffs?

A more explicit link between CECVs and export tariffs is not required. When setting tariffs, including time of use tariffs, DNSPs are required to ensure that those tariffs reflect the efficient cost of providing the service to which that tariff relates.

For export tariffs, this means we will need to:

- Avoid any overlap between cost drivers when calculating the costs to reflect in export charges and for consumption charges.
- Ensure our export charges reflect the incremental cost of providing additional export capacity. That is, export charges only reflect the cost of providing additional hosting capacity, and not the capacity of the network used for providing the consumption service.

Q7: How could we estimate CECVs across different customer groups?

We do not consider that having CECVs across different customer groups is necessary.

Q8: Should CECVs be estimated by NEM region?

CECVs should be estimated by NEM region.

Q9: Should CECVs for a particular NEM region reflect the impact of DER export curtailment that occurs in other NEM regions?

While CECVs within a NEM region could be impacted by the level of interconnection and the behaviour of other market participants, capturing this impact should not be a priority at this stage (see our response to Question 14).

Q10: What is the appropriate temporal aggregation for estimating CECVs?

Q11: Should we also estimate CECVs into the future, or allow DNSPs to forecast changes in CECVs over time?

The use of annual CECVs is appropriate. Developing CECVs based on, for example, the time of day and/or seasonality is unnecessary at this time.

AER guidance on the factors that DNSPs could consider when developing their forecasts of changes in CECVs over time would be welcome. However, DNSPs should have discretion as to how they prepare their own forecasts. This flexibility will ensure DNSPs can consider, in a timely manner, the underlying relationships in the relevant data and the extent to which the underlying drivers of that data may need to change.

Q12: Do shorthand approaches provide sufficient forecasting ability or is electricity market modelling necessary for calculating CECVs?

While longhand approaches to calculating CECVs may have some benefits, shorthand approaches provide sufficient forecasting ability. Given the AER will be calculating CECVs annually (for the year ahead), any error and/or change in demand/changes in technology cost can be addressed as part of the next (yearly) calculation. Importantly, shorthand approaches avoid some of the major drawbacks associated with using electricity market modelling, namely the need for agreement on numerous inputs and the lack of transparency (the latter of which is increasingly important for stakeholders).

Q13: How should generator bidding behaviour be modelled?

Q14: How should interconnector behaviour be modelled to determine regional CECVs?

As a DNSP we are not best placed to provide guidance on how generator bidding behaviour or interconnector behaviour is modelled. However, we note that:

- Any modelling that is undertaken should be based on best practice.
- Modelling this behaviour accurately over model timeframes is likely to be challenging and there is unlikely to be a definitive answer.
- Consideration of strategic generator bidding behaviour does not appear to be an unreasonable approach.