

28 September 2020

CSIRO
vader@csiro.au

Locked Bag 14051
Melbourne City Mail Centre
Victoria 8001 Australia
T: 1300 360 795
www.ausnetservices.com.au

To whom it may concern

Value of Distributed Energy Resources: Methodology Study Consultation Draft Report

We welcome the opportunity to respond to the CSIRO and CutlerMertz's 'Value of Distributed Energy Resources: Methodology Study Consultation Draft Report'.

With the adoption rates of distributed energy resources (DER) increasing and customer expectations with respect to DER use evolving, having a future proof methodology that can accurately capture the value of DER will become increasingly important. During this period of energy transition it is challenging to establish this methodology and we support this consultation as being an important step in setting this value.

In our Energy Distribution Price Review (EDPR) proposal for 2022-26 we have included a DER hosting capacity program that proactively targets areas we expect will experience constraints or voltage compliance issues. This is an economically justified project to ensure our customers can export excess energy where the cost of us carrying out works is economically efficient.

Under this program, work will only be undertaken where the benefit to the wider customer base – through reduced wholesale market prices – offsets the cost of carrying out the work. The Victorian Feed in Tariff (FiT) is used to value DER for the purposes of this assessment. Importantly, this program has been developed over the last 2.5 years, through an extensive technical development process and customer consultation, including negotiations with the Customer Forum. While we recognise the value in developing a DER valuation approach, this is a complex exercise that is being considered under tight timelines.

For the reasons set out below, we consider there is a sound rationale for applying the Victorian FiT to value DER. While we support the current consultation, we would be concerned if a late change were applied to our regulatory proposal, which materially impacts the experience of our customers (both DER and non-DER) over the next 5 years. It is essential that appropriate stakeholder consultation can be undertaken on both the value and the outcomes for customers prior to implementation. This will also ensure that any proposal put forward can deliver outcomes that align with stakeholders' expectations.

Our comments on the methodology are summarised below:

- Our approach to forecasting the amount of efficient augmentation is to estimate the cost of the lost solar exports that would need to be constrained to maintain compliance and compare that to the cost of augmentation options. Importantly, our base case involves reducing export limits to a low or zero level rather than allow tripping to occur (which results in a negative customer experience). This is done to be consistent with the RIT-D base case guidance. Tripping is not

a technically acceptable option nor is it credible due to the Victorian Electricity Distribution Code (EDC). A base case involving tripping would require us to accept:

- operation at a higher network voltage for all customers not only solar customers;
 - an increase in voltage bandwidth, which will increase costs to manage low voltage issues; and
 - more customer complaints, which would not be consistent with our customers' expectations.
- Using the Victorian single rate feed in tariff (FiT) as a proxy for the value of the benefit of removing constraints on solar exports is reasonable. The FiT is calculated using essentially the same methodology as the shorthand Running Cost Method as set out in the consultation. In addition, while we agree (all other things remaining equal) that additional investment in solar PV generation will tend to result in half-hourly prices that are lower in the middle of the day, there are factors, such as increased use of batteries, that mean that half hourly prices at times of solar PV generation may not fall. We also note that while the FiT has shown some volatility, there is no clear evidence that the FiT has trended lower over time. Caution must therefore be applied before assuming that half hourly prices at times of solar PV generation will fall over time.
 - The only reasonable approach to forecasting how the value of DER will change over time is the longhand market modelling approach, and these approaches are not without shortcomings. Where transparency and customer engagement are stated as key considerations, the ability for interested parties to fully engage and challenge the assumptions used in these propriety models is limited.
 - Network investments do not directly result in increased costs of DER investment as:
 - customer decisions on DER (including solar PV and batteries) are driven by a range of factors, which means that attributing the cost of these customer investments to DER services is challenging;
 - customers that invest in DER are unlikely to consider network conditions when making their investment decisions (which means that for many network investments, DER investment will be unchanged); and
 - estimating the costs of investments that provide a range of services beyond supplying electricity to the grid (including but not limited to electric vehicles) and attributing those costs to DER services is impractical.
 - There may be merit in establishing:
 - a framework for forecasting a change in DER that recognises that many of the drivers of DER investment are not related to the capacity of the network; and
 - a 'rule of thumb' to account for the value of intangible benefits of DER to ensure relevant costs and benefits are counted.

To assist us in preparing our response to this consultation we engaged Frontier Economics. We have attached a copy of that report for your consideration.

Please contact [REDACTED] if you have any questions on this submission.

Sincerely,



Charlotte Eddy
Manager Economic Regulation
AusNet Services