

31 January 2020

Ms Sarah McDowell  
Director, Energy

Essential Services Commission  
Level 37, 2 Lonsdale Street  
Melbourne, VIC 3000

Locked Bag 14051  
Melbourne City Mail Centre  
Victoria 8001 Australia  
T: 1300 360 795  
[www.ausnetservices.com.au](http://www.ausnetservices.com.au)

Dear Sarah,

### **Review of the technical standards in the Electricity Distribution Code draft decision**

AusNet Services is pleased to have the opportunity to make this submission in response to the Essential Services Commission's draft decision on the technical standards in the Electricity Distribution Code (**EDC**) to modernise the technical requirements for all Victorian electricity customers.

We welcome the Commission's draft decision to align technical requirements in the EDC with current Australian Standards, and proposed requirements to report how smart meter technology is used to enhance customer outcomes. In particular, the alignment of the voltage management thresholds with Australian Standards provides a greater operating range for both the distribution network service providers and renewable energy generators and allows us to target investment appropriately.

However, the proposed introduction of reporting obligations for network voltage at an aggregated level would not provide customers and stakeholders with beneficial information. The proposal to section high voltage feeders into 1/10<sup>th</sup> of the total length is not aligned to electrical attributes and would require a significant amount of work to report. Even then, while this information is intended to provide improved transparency on voltage levels of the grid, it would not assist customers in understanding network related opportunities and constraints.

We believe possibly a better alternative would be to provide customers and stakeholders with more granular and customer specific information voltage information. We could do this for every feeder based on remotely read smart meter data and provide customer specific voltage data on request. Each customer with a remotely read smart meter should be entitled to receive from their distribution business, upon request, voltage information measured at their remotely read smart meter. Instead of providing average data averaged over 3-months, all voltage provided would be best framed around the 1% and 99% voltage levels consistent with Australian Standards for voltage management.

This would allow customers to be better informed of any potential voltage issues impacting their decisions to invest in new solar photovoltaic (PV) and battery systems. It would also show to stakeholders our efforts to make the grid more conducive to hosting renewable generation.

In measuring the voltage on the distribution network, it is important to understand the monitoring of voltage with smart meters was not envisaged in AS 61000.3.100 but is vastly superior to the prescribed method. The standard presumes a statistically significant population of dedicated voltage monitoring equipment that averages the voltage every 10 minutes. Smart meter voltage measurements are different and vastly superior to sampling with dedicated voltage monitoring

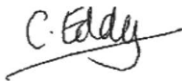
equipment, because measurements can be taken at each premises' electrical installation every 5 minutes based instantaneous voltage readings. Averaging voltage measurements dilutes the usefulness of the data for purpose of operating the grid.

AusNet Services voltage monitoring creates a rich source of network data using time synchronised measurements for 99% of premises with smart meters measuring the instantaneous voltage every 5 minute. Without the use of instantaneous voltage and other power quality measurements, we would not be able to so effectively support better safety and network reliability initiatives. However, our approach creates a rich source of network data, but instantaneous readings are more sensitive to sub-minute and sub-second voltage variations than dedicated voltage monitoring equipment. In assessing compliance this needs to be considered.

We would be pleased to discuss these reporting requirements with the staff at the Essential Services Commission prior to the final decision.

If you have any queries about any of the positions outlined in this submission, please do not hesitate to contact Justin Betlehem on 03 9695 6288.

Yours sincerely,

A handwritten signature in black ink that reads "C. Eddy". The signature is written in a cursive style with a horizontal line underneath the name.

Charlotte Eddy  
Manager Economic Regulation