





17 January 2020

Ms Sarah McDowell Director, Energy Essential Services Commission Level 37, 2 Lonsdale Street Melbourne VIC 3000

Via: Engage Victoria

Dear Sarah

Review of the technical standards in the Electricity Distribution Code

CitiPower, Powercor and United Energy welcome the opportunity to comment on the Essential Services Commission's (ESCV) draft decision relating to the technical standards contained within the Victorian Electricity Distribution Code (EDC).

The EDC sets technical requirements and standards for distributors to regulate supply arrangements between customers and distributors. The purpose of the EDC review is to modernise the technical standards to ensure they remain fit-for-purpose and meet the long term interests of Victorian customers.

The ESCV's draft decision proposes to:

- implement more flexible voltage standards by adopting the equivalent Australian Standards (AS61000.3.100)
- revise the fixed voltage parameters to enable a customer to seek compensation for damage under Guideline 11 (voltage variation compensation)
- update legacy standards and regulations to promote industry best practice
- harmonise technical standards and certain clauses with the National Electricity Rules (Rules)
- introduce new distributor reporting requirements on how smart meter technology is being used to enhance the management and operation of the distribution system
- not change the standards relating to minimum technical requirements for embedded generation, supply frequency, impulse voltage, load balance and fault level
- give effect to the proposed code amendments in March 2020.

We welcome and support the ESCV draft decision to align the technical standards requirements with the Rules or the current Australian Standards, thereby moving towards a nationally consistent approach.

We are concerned, however, that the proposed new distributor reporting requirements on network power quality at an aggregated level will not provide meaningful information to stakeholders.

Distribution power system power quality information

The new reporting obligations for network power quality information are intended to provide interested stakeholders with greater detail on our networks and limitations.

The information is primarily intended to assist in identifying sites with solar photovoltaic (**PV**) export constraints (solar hosting capacity), and peak demand voltage drop constraints. Rather than averaged voltage data, we consider the reporting should be best framed around 1% and 99% voltage levels consistent with the Australian Standards that the ESCV is seeking to adopt relative to the 230+10%/-6% limits with a focus on identifying worst

performing/constrained sites, and being able to geographically locate such sites. As the voltage amendments in the EDC are related to low-voltage (LV) only and the fleet of smart-meters needed to report the data are at LV, the reporting should be based on low-voltage only.

We do not consider that the proposal to section high voltage feeders into $1/10^{th}$ of the total length is practical, nor would it provide meaningful information. This is because the $1/10^{th}$ markers on the feeders do not have an electrical attribute, and would require a significant amount of work to define and maintain. In addition, feeder lengths change every year depending on the addition or removal of customers, and hence these $1/10^{th}$ sections would have to be redefined every year. We note that some of the shortest and longest feeders in the CBD only supply one customer, and some of the $1/10^{th}$ sections on long rural feeders supply towns over 100km apart from one another. Furthermore, some of the key factors that influence voltage constraints such as peak demand levels and solar PV clustering is not adequately captured in this reporting approach.

Alternatively, we suggest using logical electrical information such as grouping customers by distinct voltage control zones as in in-line voltage regulators and zone substations, which are already part of the network model that automatically maintain connectivity with customers. Using in-line voltage regulators and zone substations would provide voltage control zones with the required power quality information. In addition, all feeders and therefore all LV customers in our network would be represented in the reporting, not just the customers on the three nominated feeders.

We are happy to further explore and discuss these reporting requirements with the ESCV prior to the final decision. In particular, we would welcome a discussion on what distribution power system power quality information is required, how it should be reported, and the most efficient and effective way of collecting this within the current network constraints.

Should the ESCV have any queries regarding this submission, please contact Elizabeth Carlile on (03) 9683 4886, or ecarlile@powercor.com.au.

Yours sincerely,

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General Manager Regulation

CitiPower, Powercor and United Energy