



Institute of Electrical Inspectors Australia via email: memberships@iei.org.au

11 November 2019

Dear Sir/ Madam,

With the increased penetration of Distributed Energy Resources (DER) in the electricity network, voltage rise due to embedded generation grid export continues to affect power quality for customers - both solar customers, by causing the inverters related to their PV systems to trip off supply, as well as the power quality of non-solar customers in the area.

To help improve the amount of solar our networks can accommodate while maintaining reliable power quality for all customers, Victorian Distribution Network Service Providers (DNSPs) have been working to standardise Basic Micro Embedded Generation (EG) Connection Guidelines. CitiPower, Powercor, United Energy, AusNet Services and Jemena will be mandating power quality response mode capability, and associated settings, for inverter energy systems installed from **1 December 2019**.

A revised Model Standing Offer (MSO) for Micro Embedded Generator Basic Connections, for each of the DNSPs, approved by the Australian Energy Regulator, has been updated to require new inverters to have power quality response settings applied. The two settings are:

- 'volt-var' settings to provide dynamic reactive power output to absorb some of the voltage rise from solar exports
- 'volt-watt' settings to reduce real power export once specified voltage limits are reached, to manage voltage rise from solar exports

The Power Quality Response Mode settings will work towards ensuring network voltage remains within allowable parameters, allowing customers to generate for longer, and allowing more customers to connect to the grid.

These changes align with the Energy Network Australia (ENA) Micro Basic EG Connection Policy Guidelines released on 7 March 2019, which stipulate that inverters with power quality response modes should be mandated and the specific reference values or settings, if different to the default, should be advised by the DNSP. To ensure a consistent approach across Victoria for installers, customers and the industry more broadly, Victorian DNSPs have agreed on unified settings for volt var, volt watt and sustained operation for voltage variation.

The date of 1 December 2019 was chosen to align with the introduction of the DER Register, with the intention of a coordinated change approach for DER Connections.

The attached document outlines the new mandatory settings.



Next steps

We ask for your support in communicating these power quality response modes to industry and installers, through your existing communication channels, such as Technical Notices to Market, Installer Information Nights, Newsletters etc. If you would like to meet to discuss these changes in more detail, or how you could provide support, please contact the nominated representatives for each DNSP below:

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Yours sincerely,

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