Proposed changes to Solar Connection Standards

We are currently seeking feedback on proposed changes to our standards for the connection of solar, batteries and other embedded generation to our distribution network. We are committed to consulting with the solar industry on changes that affect you and welcome your feedback. We are proposing the following changes to the standards:

Standard for connection of micro embedded generating (EG) Units (0 - <30kVA)

- To reduce network protection risks, the International Standard IEC62116 Utility-interconnected photovoltaic inverters – Test procedure of islanding prevention measures, would be required for inverters connecting from 1 February 2019.
- Reactive Power Control (RPC) would be required for all new inverters connecting to the network regardless of system size, export limits or network location. Currently acceptable RPC modes are:
  - Fixed power factor mode set to 0.9 lagging (inductive), or
  - Volt-var response mode set as per the standard requirements
- Other minor changes to align the document with current statutory requirements.

Standard for connection of EG systems (>30kW - 1,500kW)

We are proposing to change the frequency protection settings. Retrospective changes on existing systems would not be expected.

If you would like to provide your feedback on these proposed changes please complete this survey by 5pm Friday 10 August.
New Joint HV Standard coming soon

Over the past two months Energex and Ergon Network sought industry feedback on a new joint draft standard for the connection of EG systems to our High Voltage (HV) distribution network. We appreciate the interest and valuable feedback we received during consultation and will consider this in development of the final version of the HV EG Connection Standard.

The new standard will be released in August and will replace four connection standards currently in use across Energex and Ergon Network. The standard will apply for inverter connections where the connection point to Energex or Ergon Network is at the HV and the total embedded generating system capacity at the connection point is greater than 30 kW.

Protection device compliance

As per Section 7.1.1 of the Ergon Energy and Energex Joint Standard for Connection of Embedded Generating Systems (>30 kW to 1,500 kW) to a Distributor’s LV Network:

“Protection equipment shall comply with the relevant sections of IEC60255 and shall operate the isolation device either directly or through interposing equipment that also complies with the following sections of IEC60255:

- IEC60255-1 Common requirements
- IEC60255-26 EMC requirements
- IEC60255-27 Product safety requirements
- IEC60255-127 Functional requirements for over/under voltage protection, and
- IEC60255-12 Directional relays and power relays with two input energising quantities.”

We have been advised by industry that devices compliant with IEC60255-127 functional requirements for over/under voltage protection are difficult to source. We are issuing an exemption to the requirement for protection equipment to comply with IEC60255-127. The exemption will expire, unless advised otherwise, on the 1st of October 2018. Devices installed under the exemption period will not require replacement after the exemption period for the purpose of complying with IEC60255-127.

Inverter anti-islanding compliance

Earlier this year there was an incident in the Energex network where a solar inverter system failed to disconnect on loss of mains. The device was isolated and the incident was reported to the Electrical Safety Office.

The operation of anti-islanding protection in inverters ensures the safety of customers, contractors and our field staff working on the network during an outage. When undertaking commissioning tests on inverters, please ensure you test and confirm the correct operation of anti-islanding protection.
The Clean Energy Council (CEC) has delisted inverters from three separate inverter manufacturers; Shenzhen Sofar Solar Co Ltd, Shenzhen JingFu Yuan Tech Co Ltd and One Solar International Pty Ltd; after testing showed an inverter from each manufacturer had failed to meet anti-islanding compliance. The Australian Competition and Consumer Commission issued a product safety recall related to the Shenzhen Sofar Solar Mass Energy Inverter.

Please note that inverters must not be installed on the Energex or Ergon Energy network after an inverter has been delisted by the CEC. We also encourage industry to replace inverters that are currently connected and have been delisted as soon as possible.

**Upcoming QECMM changes**

The Queensland Electricity Connection and Metering Manual (QECMM) provides minimum requirements for connection of supply and metering of customer installations. Following Power of Choice reform to expand competition in metering and related services, we are currently working with the Competitive Metering Industry Group to separate the metering components of the QECMM into a separate document. This means in future the QECMM will be replaced by two documents:

- The Queensland Electricity Connection Manual (QECM)
- The Queensland Electricity Metering Manual (QEMM)

We’ll keep you updated on the new manuals which are expected to be released early August.

**$50 cashback now available**

For a limited time, the owner of a property or the occupier of a property (who has obtained the property owner’s consent) where a battery storage system is installed, can get $50 cashback if they register their battery with us. Even if the battery system was installed some time ago, they can still claim the cashback.

**Please contact your customers who you have installed a battery storage system for to let them know they can claim the cashback.**

So we can let your customers know about the $50 cashback in the future, please make sure you enter your customer’s email address when lodging a connection application. Also, you may not be aware but it’s a regulatory requirement to submit a connection application to us seeking permission to connect a battery system. Once we receive the connection application, we will assess it and make a connection offer.

For more on the Energy Resource Register please visit our website.

**Transition to 230V Standard**
In October 2017 an amendment was made to the Queensland Electricity Regulation to mandate a transition from the 240V to 230V standard by 26 October 2018. One of the benefits of the switch to 230V is that it will help our network support more solar and battery connections in the future.

**What this means for you**

- The new statutory limits are now between 216V and 253V
- Voltages between 216V and 225V are now compliant
- Voltages between 253V and the old upper limit of 254.4V will no longer be compliant from 27 October 2018
- By 1 July 2020 the median voltage should be between 225V and 244V

**What’s changing?**

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<tr>
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<td>$\pm 10%/-6%$</td>
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Further information can be found in the [Energy Academy Presentation](#) and on our [website](#).

If you have any queries please [email us](#).

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