



# PV Industry Alert

*Special Issue: >30 kW connections*

August 2016 – Issue 28

If your business is involved in connecting Embedded Generating (EG) systems >30 kW<sup>1</sup> via an Inverter Energy System (IES) or rotating machine, you will be assisted through the connection process by our Major Customer Group.

In this Alert:

- Changes to the Standard for Connection of Embedded Generating systems up to 5 MW
- The connection process for EG systems above 30 kW.

## **Changes to Standard for Connection of systems rated up to 5 MW**

It is the responsibility of the system designer and the installer to ensure the system complies with the applicable connection standard. We have recently revised the [Standard for Connection of Embedded Generating Systems 5 MW and below in the Ergon Energy Distribution Network \(STNW1165\)](#) to reflect evolving technologies and streamline the design and connection process.

We have removed the requirement for Neutral Voltage Displacement (NVD) protection for exporting inverter energy systems sized above 30 kW and up to 200 kW, where they can meet the requirements of Annex E of STNW1165. The key requirements are:

- All inverters must comply with IEC 62116 (Edition 2)
- An independent connection point protection is provided with under/over voltage, under/over frequency and rate of change of frequency (ROCOF) protection functions.

Please note that all applications are assessed, evaluating the proposed generating system rating and characteristics of the network up to the connection point. A negotiated offer could result in the proposal of a partial or non-export system for the application.

We are keen to ensure that any system connected to the network is done safely and provides the optimal solution for customers.

<sup>1</sup> **Please note** we use kVA ratings up to 30 kVA to reflect Reactive Power Control settings. Above 30 kW/kVA, kW and MW ratings are used as assessments are primarily based on maximum real power of the embedded generation system.

## Submitting applications and Form As

For EG systems rated above 30 kW, the processes to submit an application and a Form A differ from those for micro EG units up to 30 kW/kVA.

### Applications

**Non-exporting** - For non-exporting EG systems above 30 kW, an [Application to Connect form](#) can be downloaded from our website and lodged via email.

**Exporting** - As exporting EG systems above 30 kW and up to 5 MW are more complex, we encourage applicants to download an [Enquiry form](#) from our website and lodge it via email. We will respond with options and information to help you lodge your application.

More information is available on our [Large scale renewables and generation webpage](#).

*Note, the Electrical Partners Portal is not able to support the lodging of applications for EG units rated above 30 kW.*

### Form As

We recommend that all Form As be lodged via our [Electrical Partners Portal](#). We do accept Form As lodged by fax or email; however, processing may take longer.

During lodgement in the Electrical Partners Portal, the Form A must be linked with an Application to Connect (or 'Connect' for short) to proceed to the next stage<sup>2</sup>. For systems above 30 kW, this can only occur when:

- An RPEQ (Registered Professional Engineer of Queensland) Compliance Report for the installation has been submitted and endorsed by us
- An executed consent agreement has been returned by the applicant to the Major Customer Group
- The Major Customer Group has accepted the application and notified the Connect Reference Number to the consultant/electrical partner.

Upon receipt of a Form A linked to a Connect, a final inspection of your EG system by us will be scheduled. Once we are satisfied with the installation and appropriate metering has been installed, the system can be switched on.

### Other information

Our fees applicable to applying for and connecting an EG system rated above 30 kW and up to 5 MW will be quoted to the applicant. These vary depending on your proposed EG system design and location within our network.

More information on the process and fees for the connection of an exporting EG system rated above 30 kW and up to 5 MW are detailed in our [Embedded Generation Information Pack](#) on the [Large scale renewables and generation webpage](#).

<sup>2</sup> **Please note** a Form A can be saved at any time; however, to continue the connection process a link to the relevant Connect must occur.