



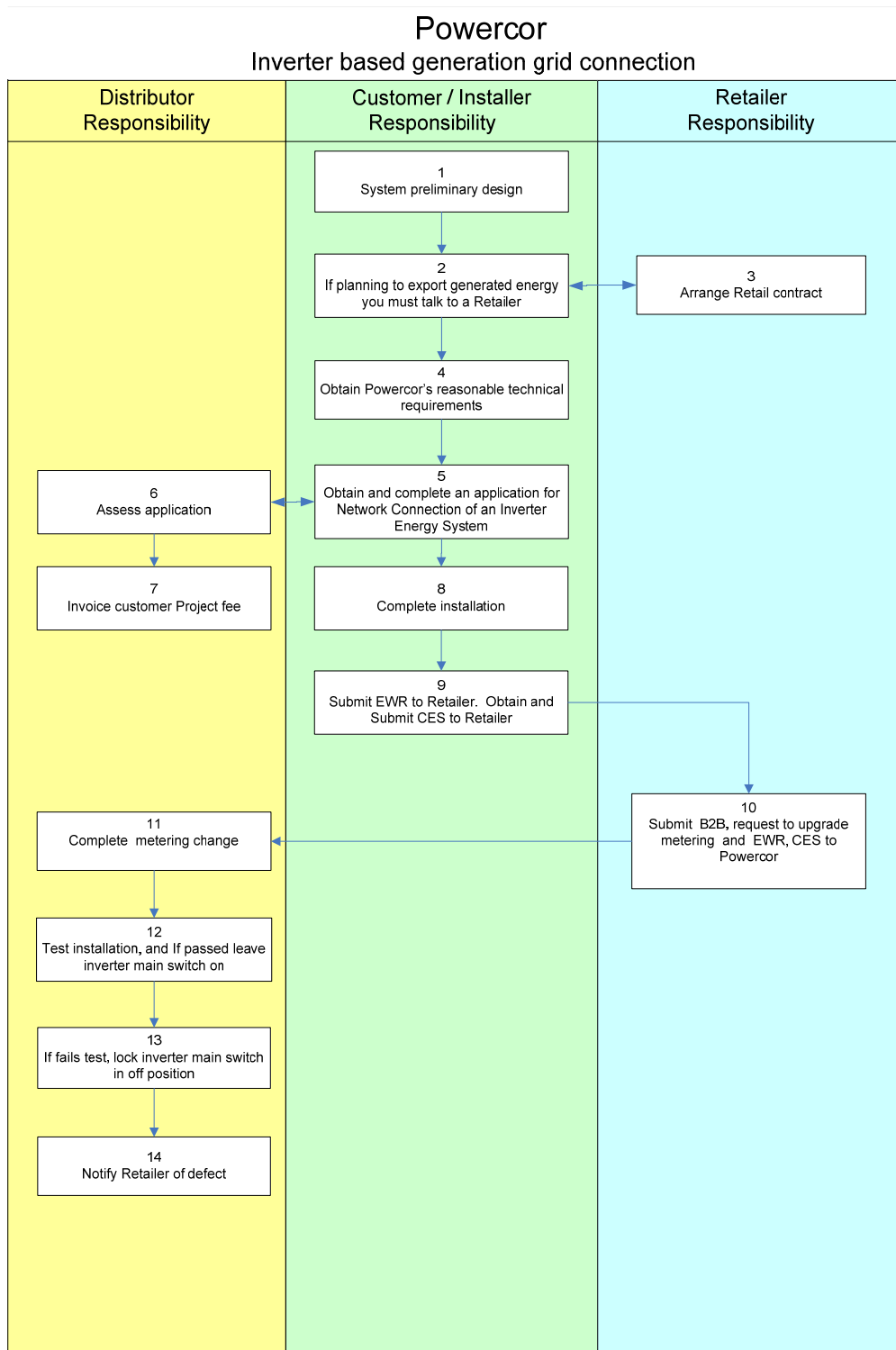
Warning: Printed copies of this document not in an official Manual MAY NOT BE THE LATEST. The most up-to-date version is located on The Volt.

INSTALLER GUIDELINES FOR GRID CONNECTION OF INVERTER POWER SOURCES UP TO 10 KW

Document Administrator: Colin Jenkins	Nominated Approver: Colin Jenkins
Document no: 06-G265 Issue no: 2	Issue date: 22/09/2008 Page 1 of 6

INSTALLER GUIDELINES FOR GRID CONNECTION OF INVERTER POWER SOURCES UP TO 10 KW

Powercor Australia Ltd



Document Administrator: Colin Jenkins	Nominated Approver: Colin Jenkins
Document no: 06-G265 Issue no: 2	Issue date: 22/09/2008 Page 2 of 6

Warning: Printed copies of this document not in an official Manual MAY NOT BE THE LATEST. The most up-to-date version is located on The Volt.

Summary of charges

Project Fee

On receipt of the customer signed Powercor connection agreement, a project fee of \$160.60 will apply. An invoice for the project fee will be sent to the customer.

Connection

Powercor will invoice the customer’s retailer the approved standard service prices as approved by the ESC for any metering that requires upgrading and any other applicable fee for other work requested additional to the metering change.

Works	Price
Service Truck Visit	\$170.20

Notes:

1. All prices include GST.
2. For new installations an electricity supply connection - new premises fee applies. Refer to the standard fees for new connections on the Powercor website.

Step 1 – System preliminary design

- Determine type of generation system such as solar photovoltaic or wind etc.
- Obtain preliminary information from the Sustainable Energy Authority of Victoria (SEAV).
- Obtain information from the Powercor website: “Customer Guidelines for Grid Connection of Inverted Power Sources Up to 10 kW”
http://www.powercor.com.au/Electricity_Networks/Powercor_Network/Connections/Connecting_Generators/
- Obtain information from Retailers on tariffs available.
- Determine approximate power output in kW.
- Determine if the generator output will be single phase or multi phase.
- Contact system installer(s) and confirm scope and supply arrangements. Negotiate installation service with system installer.

Step 2 & 3 – Customer to contact electricity retailer(s) and negotiate suitable tariff

- Obtain information from retailers on the electricity tariffs available for the sale of electricity generated and for the purchase of energy consumed.
- Select a retailer and tariff.
- Retailer to send customer agreement to sign.
- Note only Net metering is provided to the inverter installations.

Document Administrator: Colin Jenkins	Nominated Approver: Colin Jenkins
Document no: 06-G265 Issue no: 2	Issue date: 22/09/2008 Page 3 of 6

Step 4 – Obtain distributor reasonable technical requirements

The technical standards and connection agreement to be made between the customer and Powercor are available, from the Powercor website:
http://www.powercor.com.au/Electricity_Networks/Powercor_Network/Connections/Connecting_Generators/

- Refer to Clause 6.8 of the 2005 Victorian Service and Installation Rules (SIR) which can be viewed at the following website: www.victoriansir.org.au. Hard copies are commonly available from electrical wholesalers.
- Additionally you can call the customer enquirers number 132 206 and speak to a customer projects officer.
- The installation must be compliant with the applicable Wiring Rules, Acts and Regulations, including, these standards prior to connection.

Step 5 – Complete Application for Network Connection of an Inverter Energy System

- Obtain the Application for Network Connection from the Powercor web:
- The agreement contains the information that Powercor needs as part of the process in connecting the inverter to the grid.
- Complete all details on the application. You may need the help of your installer and Retailer to provide some of the necessary information.
- Send completed and signed connection agreement to Powercor to the nearest Powercor office to your installation.

Office	Postal Address	Office Location
Head Office	Locked Bag 14090 MCMC Melbourne Victoria 8001	40 Market Street Melbourne Tel: +61 3 9683 4444 Fax: +61 3 9683 4499
Ardeer	Locked Bag 6, Sunshine 3020	Cnr Western Ring Rd & Ballarat Rd, Ardeer Tel: (03) 5327 2454 Fax: (03) 5331 9139
Ballarat	PO Box 572, Ballarat 3350	990 Norman St, Wendouree Tel: (03) 5327 2454 Fax: (03) 5331 9139
Bendigo	Private Bag 8004, Bendigo 3350	601-611 Napier St, Epsom Tel: (03) 5440 5804 Fax: (03) 5440 5795
Geelong	PO Box 185, Geelong 3220	Roseneath St, North Geelong Tel: (03) 5240 7511 Fax: (03) 5240 7751
Mildura	PO Box 544, Mildura 3502	Eleventh St, Mildura Tel: (03) 5022 5902 Fax: (03) 5022 5991
Shepparton	PO Box 6141, Shepparton 3632	8-10 Wheeler St, Shepparton Tel: (03) 5820 2601 Fax: (03) 5820 2695

Step 6 & 7 – Powercor assess application

Document Administrator: Colin Jenkins	Nominated Approver: Colin Jenkins
Document no: 06-G265 Issue no: 2	Issue date: 22/09/2008 Page 4 of 6

- On receipt of the application Powercor will:
- Confirm the inverter is of the approved type.
- Assess the installation and its impact on the distribution network
- Invoice the customer the project fee of \$160.60

Step 8 – Construction

- The system shall be installed and preliminary testing undertaken.
- A registered electrical contractor (REC) will be required to do all fixed wiring.
- The inverter main isolating switch should be left in the off position

Step 9 – REC to submit an EWR to upgrade metering and REC to obtain CES

- Powercor will be advised by the retailer that bi directional metering is required. Following installation of the generator system the installation will need to be inspected by an 'S' class licensed electrical inspector who must sign a CES.
- If the generating system is to be connected to an existing installation, then a metering upgrade shall be required and the registered electrical contractor (REC) shall submit an electrical works request (EWR) to the Retailer. If any part of the installation, including the meter panel does not satisfy the SIR's, the installation shall be modified to meet current standards. If the meter panel needs to be upgraded then the REC should request a truck appointment and co-ordinated the upgrade of the panel with the meter change. Note the supply of photos of the meter board may assist in determining if the meter panel needs replacing. A truck appointment can be booked following submission of the EWR which is in advance of the work being completed.
- Submit the Electrical Works Request (EWR) and CES to the Retailer who will contact Powercor and arrange for the meter upgrade and connection of the inverter. Normally an appointment is not required for the connection if the meter panel is OK.

Step 10 – Retailer to request work

- The Retailer requests the connection and meter change using the industry B to B process. The Retailer also provides the EWR and CES to Powercor.

Step 11 – Meter change

- Powercor will complete the metering change.

Document Administrator: Colin Jenkins	Nominated Approver: Colin Jenkins
Document no: 06-G265 Issue no: 2	Issue date: 22/09/2008 Page 5 of 6

Step 12 – System switch on and final tests

- Once the new electricity meter is installed and network connection is restored the generating system can be switched on and final testing completed. Access to the inverter main switch is required to complete the tests.
- Powercor will complete a fail safe test. If the installation passes all tests the inverter main switch is left in the on position.

Step 13 – Turn on the Inverter main switch

- The customer (system owner) can turn on the Inverter main switch to allow any excess generation to be exported to the grid.

Step 13 &14 – Inverter fails test

- Powercor will complete a fail safe test. If the installation fails the tests or is not compliant to any SIR requirements covering the installation, the inverter main switch is left locked in the off position.
- Powercor will notify the Retailer of the defect and await advice that the faults have been rectified. Upon this advice the installation will be checked and if OK unlocked.

Document Administrator: Colin Jenkins	Nominated Approver: Colin Jenkins
Document no: 06-G265 Issue no: 2	Issue date: 22/09/2008 Page 6 of 6