



Customer's Rights and Obligations

Small Inverter Based Systems

(up to 10kVA per phase)

Alinta AE Ltd

INTRODUCTION

This document details the rights and obligations of the grid connection of a small generator such as a photovoltaic system (PVS) or any other embedded generator via an inverter energy system with ratings up to 10kVA per phase ("Inverter Installation").

Please read about your rights and obligations then complete Schedule 1 and return this signed to New Connections. Refer to address below.

New Connections
Alinta Asset Management
Locked Bag 7000
Mount Waverley Vic 3149

RIGHTS AND OBLIGATIONS

Compliance

You must ensure your Inverter Installation complies with the relevant requirements of the following Standards, Code and Regulations:

- Victorian Electricity Supply Industry (VESI) Service & Installation Rules 2005 (SIR)
- Electricity Distribution Code;
- Australian Standards and in particular, requirements of the Wiring Rules AS3000;
- AS 4777
 - i) Part 1 "Grid Connection of Energy Systems via Inverters, Installation Requirements"
 - ii) Part 2 "Grid Connection of Energy Systems via Inverters, Inverter Requirements"
 - iii) Part 3, "Grid Protection Requirements"; and
- Electricity Safety Act 1998 and the associated safety regulations.

Customer Obligations

You must install, maintain and operate the electrical equipment at your Inverter Installation so as not to cause, or be likely to cause any damage or loss to AAE or any Third Party, and only allow appropriately qualified people to perform work on your Inverter Installation. In addition to this, you must ensure that:

- Your generator Installed Capacity does not exceed 10kVA per phase.
- The operation of the installation does not compromise the safe operation of AAE's network under normal or abnormal conditions and does not interfere with the continuity or quality of the electricity supply provided by AAE's network.
- Prior to the initial connection your Inverter must have a Certificate of Electrical Safety (CES) that ensures your Inverter Installation has been inspected by an appropriately trained licensed electrical inspector and is compliant with the Electricity Safety Act and associated safety Regulations.
- You notify AAE (refer to Notices) of any major modifications to your existing generator e.g. installation of additional solar panels or replacement of the Inverter with a different size or type. Refer to *Notices* below.

Distributors Right to disconnect your Inverter Installation

AAE may disconnect your Inverter Installation from AAE's network, or instruct you to do so, in any circumstance in which AAE is entitled or obliged to interrupt the supply of electricity. You must promptly comply with any instruction given by AAE or its authorised representative.

Notices

If you have any enquires in relations to your Rights and Obligations or if you have any questions, please direct your correspondence to the address or fax detailed below.

New Connections
Alinta Asset Management
321 Ferntree Gully Road
Mount Waverley Vic 3149
Fax: (03) 8544 9848

Definitions

Capitalised terms used in this document are described in Schedule 2.

Schedule 1

Installation - Technical Specification

Customer Name & ABN	
Connection Point <i>(Location of Inverter Installation)</i>	
Customer Mailing Address	
Customer Phone & Fax	
Fuel Source e.g. solar, wind, hydro	
Inverter Make/Model	
Inverter Rating (kVA)	
No. of Phases (Inverter)	<input type="checkbox"/> Single Phase 240v <input type="checkbox"/> Two Phase 240/480v <input type="checkbox"/> Three Phase 415v
Installed Capacity (kW)	
Metering Configuration	<input type="checkbox"/> GROSS <input type="checkbox"/> NETT
No. of Phases (Load)	<input type="checkbox"/> Two Phase 240v <input type="checkbox"/> Two Phase 240/480v <input type="checkbox"/> Three Phase 415v

Connection Compliance Checklist

If the answer is "NO" to any of the following checklist items, connection to the AAE network will be refused.

Inverter complies with AS4777?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Inverter connected to a dedicated circuit complete with lockable isolating switch?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Labelling of main switchboard?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Labelling of isolating fuse/switch/CB?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Certificate of Electrical Safety (CES)?	<input type="checkbox"/> Yes	<input type="checkbox"/> No

****This page must be returned to New Connections prior to the connection being completed**

Customer Name _____

Customer Signature _____

Date _____

Schedule 2

Definitions

Connection Point	Physical point at which your Installation Inverter is connected to the AAE network.
Four Quadrant Meter	An energy meter that measures the following four quantities: Real energy flow into an installation (Wh) Real energy flow out of an installation (Wh) Reactive energy flow into an installation (VARh) Reactive energy flow out of an installation (VARh)
Gross Metering	An energy metering configuration that measures the energy flow between the distribution network and the customer load and between the distribution network and the customer's generator independently. Measures and reports energy imported from the AAE network and exported from the AAE network separately.
Interval Meter	An energy meter that records the energy flowing through it over every 30 minutes of every day.
Inverter	An electronic device that converts direct current (DC) into alternating current (AC). Inverters compliant with AS4777 are specifically designed to convert energy produced from a DC source (such as a photovoltaic array) into AC and to inject this power into the distribution network.
kVA	Kilovolt Amps
Installed Capacity	Exported power (kW) to the AAE network at any time. (Sum of all installed solar panel ratings).
Nett Metering	An energy metering configuration that measures the energy flow between the distribution network and the customer's installation. Energy produced by the generator and consumed by customer load is combined. It is not possible to measure generator output independently. Measures energy imported from the AAE network and exported from the AAE network but reports the net value of both.
Third Parties	Persons other than AAE or the Customer.
AAE	Alinta AE Limited (The Distributor)