Application to connect Distributed Generation (DG) to Vector's electricity network (equal or less than 10kW)

Site details

ICP number (from electricity bill)	
Site address	

Generation details

Is the proposed connection a new connection or an increase in capacity?	Select option
Proposed date of installation	
Type of generation (e.g. solar, wind etc)	
Total maximum export power (in kW) including existing if applicable	
Maximum nameplate capacity (in kW)	

Inverter details

Technical specifications

- The installer must be a qualified electrician and must be familiar with the installation requirements of the AS/NZS 4777.1 and AS/NZS 4777.2 standards.
- The installer must be able to provide a signed certificate of compliance to Vector on completion of the installation, confirming the installation has been installed in according with the requirements contained in Vector's connection and operation standards.
- The installer must ensure, and certify, that the inverter settings comply with Vector's connection and operation standards.
- All inverters must be set in accordance with AS/NZS 4777.2:2020 Australia A settings. Settings have been specified in the tables below.
- All AS/NZS 4777.2 approved inverters will enable you to select pre-select Australia A settings.

Pre-approved inverter(s)

- Please see Vector's Approved Inverter List.

Inverters

How many inverters are there?	
What is the connected voltage?	Select option
What is the type of inverter?	Select option
List the make of each inverter	

List the model of each inverter	
What is the size of each inverter (in kW)?	
What is the inverter size for each V2G inverter (in kW)? *Input 0 if no V2G inverter*	
Are *all* inverters entered **above included on Vector's Approved Inverter List?**	☐ Yes - all inverters are pre-approved (no extra documents required) ☐ No - one or more inverters are not pre-approved ***Note:*** ***If you selected "No", you must provide:*** • ***an inverter datasheet, and/or*** • ***a Certificate of Suitability (CoS) confirming compliance with AS/NZS 4777.2.*** ***Applications with no preapproved inverters take longer to process and cannot be progressed until these documents are received.***

Inverter Protection Settings

The table below shows the required inverter voltage and frequency protection settings in accordance with AS/NZS 4777.2:2020 (Australia A).

Please complete the columns on the right with your inverter's actual settings to confirm compliance.

	Parameter	Required Setting Value	Required Setting Value (1ph)	Required Setting Value (3ph)	Required maximum disconnection (trip) time	Applicants' settings value	Applicants' maximum disconnection (trip) time
a	Under-voltage 2 (V <<)	0.304 p.u.	70 V	121.7 V	2 seconds	V	S
b	Under-voltage 1 (V <)	0.783 p.u.	180 V	313.0 V	11 seconds	V	S
c	Over-voltage 1 (V >)	1.152 p.u.	265 V	460.9 V	2 seconds	V	S
d	Over-voltage 2 (V >>)	1.196 p.u.	275 V	478.3 V	0.2 seconds	V	S
e	Under-frequency (F <)		47 Hz	47 Hz	2 seconds	Hz	S
f	Over-frequency (F >)		52Hz	52Hz	0.2 seconds	Hz	S

Inverter Volt/Watt and Volt/Var Settings

The tables below show the required inverter Volt/Watt and Volt/Var settings in accordance with AS/NZS 4777.2:2020 (Australia A).

Please complete the columns on the right with your inverter's actual settings to confirm compliance.

Inverter Volt/Watt Settings

	Active Power (%)	Voltage	Voltage (1ph)	Voltage (3ph)	Applicants' Active Power (%)	Applicant's Voltage Setting (V)
P1	100%	1.100 p.u.	253 V	440 V		
P2	20%	1.130 p.u.	260 V	452 V		

Inverter Volt/Var Settings

	Reactive Power (%)	Voltage	Voltage (1ph)	Voltage (3ph)	Applicants' Reactive Power (%)	Applicant's Voltage Setting (V)
V1	44% (Supplying)	0.900 p.u.	207 V	360 V		
V2	0%	0.957 p.u.	220 V	383 V		
V3	0%	1.043 p.u.	240 V	417 V		
V4	60% (Absorbing)	1.122 p.u.	258 V	449 V		

Battery information

Are batteries being installed?	☐ Yes - please provide details below ☐ No - please go to Acknowledgements
Number of batteries	
Maximum nameplate storage (in kWh)	
Maximum charge rate for each battery installed (in kW)	
Maximum discharge (export) rate for each battery installed (in kW)	

Declarations and signature

☐ I / We hereby request to connect distributed generation to Vector's electricity network

☐ I / We confirm that the property owner and the electricity account holder have consented to this application and the installation of the distributed generation

☐ I / We confirm that the information provided in this application is true and accurate

☐ I / We agree to comply with all requirements of a distributed generator as required under Part 6 of the Electricity Industry Participation Code 2010

☐ I / We agree to inform Vector of any future changes to the distributed generation installation

☐ I / We acknowledge Vector will set the maximum limit the system is able to export to its network and that this may be different from the systems full export capacity

☐ I / We confirm Transpower will be contacted if the export value is greater than 1MW

Full name	
Date	
Signature	

Any other information

Please provide the contact details for this application on the following page

Contacts

Requester details

Role of requester	Select option
Full name	
Billing address	
Daytime phone number	
Email address	

If the requester is **not** the property owner / distributed generator who has signed the application, please provide their contact details below in case we need to contact them during the application process

Full name	
Company name (if applicable)	
Daytime contact number	
Email address	