

How to correctly configure inverter settings

Solar and battery inverters in Victoria and all Eastern Australia must be installed with AS/NZS 4777.2:2020 **Australia A** settings.



Solar
Victoria



Changes to the Australian Standards for inverters (AS/NZS4777.2) impact the commissioning process for installations now and into the future. **Solar and battery inverters in Victoria and all Eastern Australia must be installed with AS/NZS 4777.2:2020 Australia A settings.**

It is your legal obligation to be aware of and to comply with these new requirements. Getting inverter settings right is crucial to connecting more solar PV and battery systems, improving grid integration and maintaining stability in the grid.

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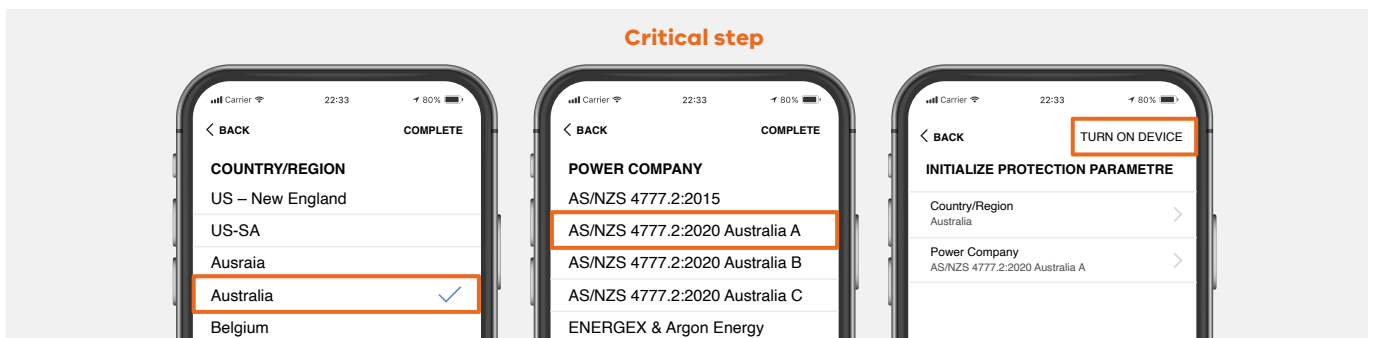
A review by the Australian Energy Market Operator¹ found many inverters are being installed to incorrect inverter settings. To correctly configure solar PV and/or battery inverter settings in Victoria, simply:

1. Select your country/region. Some manufacturers may have this pre-selected.
2. Select the **AS/NZS 4777.2:2020 Australia A** setting. The naming of zones may differ between manufacturers but may appear as:
 - » Australia A – applies to the configuration of inverter settings in **Victoria** and all Eastern Australia (South Australia, New South Wales, ACT and Queensland).
 - » Australia B – applies to the configuration of inverter settings in Western Australia.
 - » Australia C – applies to the configuration of inverter settings in Tasmania.

In doing this, you no longer need to manually set or change different DNSP settings. If you are unsure how to select 2020 Australia A settings on the inverter, please contact the manufacturer or your DNSP to confirm the correct AS/NZS 4777.2:2020 setting.

3. Turn on the device.

The below image shows the critical step an installer in Victoria must take to correctly configure the inverter setting to AS/NZS 4777.2:2020 Australia A.

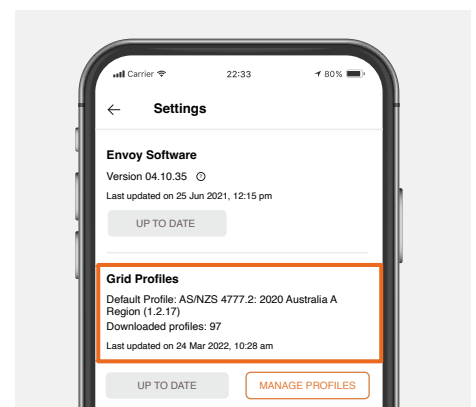


To commission inverter settings using the default function on your installer app:

1. Go to Menu/Settings
2. Check the Grid Profile is defaulted to **AS/NZS 4777.2:2020: Australia A**

Note that some inverters still show legacy options in their settings menu. **In Victoria, all installations must select the Australia A option.**

Do not select the name of the distribution network (AusNet Services, CitiPower/Powercor, Jemena or United Energy) in the menu.



¹ <https://aemo.com.au/en/initiatives/major-programs/nem-distributed-energy-resources-der-program/standards-and-connections/as-nzs-4777-2-inverter-requirements-standard>

The benefits of correctly configuring inverter settings

AS/NZS 4777.2:2020 is about improving grid integration and solar grid hosting capacity while also improving safety. All systems installed under distributor connection agreements in Victoria and all of Eastern Australia must be configured with **Australia A** inverter settings, prior to and post connection.

For installers in Victoria, configuring inverters to the 2020 **Australia A** settings will:

- » Improve grid integration through refined inverter connection and disconnection thresholds and outline discrete testing procedures.
- » Increase the amount of solar which can export excess electricity to the distribution grid by prescribing default (pre-set) grid support mode features, such as volt/watt, volt/var and freq/watt.
- » Make it easier for industry to correctly and compliantly configure inverter settings, with settings prescribed as defaults

The changes mean that solar can be relied on to perform as needed, when needed – which means more solar can continue to be installed. Interface changes also simplify commissioning.

What happens if you don't configure to the updated standard?

If your installation is identified to be non-compliant to the AS/NZS 4777.2:2020 setting requirements, you will be notified and must rectify the installation, and subsequently provide evidence of rectification. If you fail to respond, or fail to rectify, you may be suspended or lose your accreditation.

For information about audits under the Solar Homes and Solar for Business programs, including our solar battery and solar PV audit checklists, see: solar.vic.gov.au/audits.

About the standard

AS/NZS 4777.2:2020 is the Australian Standard for inverters and applies to the grid connection of both solar PV and battery systems.

The inverter is the interface between the electricity grid and the solar and/or battery system. It manages how the system interacts with the grid, including how it behaves under different grid conditions (such as during voltage or frequency disturbances).

The behaviour of the inverter is critical for the power system as their response to system events can help to prevent cascading failure that may otherwise lead to blackouts.

Installers in Solar Victoria's programs must adhere to current and relevant standards for the design and installation of solar and battery storage systems. This is an obligation through:

- » service and installation rules with your local distribution network service provider (DNSP)
- » Electrical Safety Distribution Codes
- » the National Electricity Rules
- » the Renewable Energy Act (to be eligible for STCs and LGCs)

Complying with this updated standard became a mandatory requirement in the [Solar Victoria Notice to Market](#), effective 18 December 2021. All new solar PV and/or battery inverters installed under Solar Victoria's rebate programs must comply with AS/NZS 4777.2:2020. These are listed on the Solar Victoria website at: solar.vic.gov.au/approved-products#inverters.

It is also a mandatory requirement of Solar Victoria's Notice to Market for inverters to be configured in accordance with DNSP requirements.

To comply with these requirements, inverters must be set to the region Australia A.

More information

For more information, including links to useful resources, training and workforce development and other information about our commitment to safety and quality, scan this QR code:



solar.vic.gov.au/industry



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