

AS/NZS 4777.2 2020 Amd 2:2024

20 August 2025



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FAQs for new AS/NZS 4777.2:2020 Amd 2:2024 Effective 23 August 2025

1. Why do we need to change to a new version of AS/NZS 4777.2?

In August 2024, Australian Standards released a second amendment to the AS/NZS 4777.2:2020 Grid connection of energy systems via inverters Part 2: Inverter requirements. The amendment introduced a small number of changes to improve both the performance and compliance of inverters on the electricity supply network and support suitable requirements for electric vehicles. These changes will support the continued increase of solar PV, batteries and electric vehicles. Manufacturers have been working to update their products and be listed with the Clean Energy Council (CEC) as AS/NZS 4777.2:2020 Amd 2:2024 compliant.

2. When do I need to start installing AS/NZS 4777.2:2020 Amd 2:2024 compliant inverters?

The AS/NZS 4777.2 Amd 2:2024 version of the grid-connect inverter standard is mandatory from the 23 August 2025.

There is a DER Technical Standard which is enforced under the National Electricity Rules (NER). This DER Technical Standard requires compliance of grid-connect inverters to the current version of AS/NZS 4777.2:2020. A 12-month transition between AS/NZS 4777 Amd 1 and Amd 2 will conclude on 23 August 2025 where all inverters shall require compliance to Amd 2.

3. What DNSP connection standards do I need to meet?

Energex and Ergon Energy have already updated their joint standards to support a transition to AS/NZS 4777.2:2020 Amd 2:2024. These embedded generating system standards are current and already in effect, with new dedicated Isolated Networks standards coming soon.

The new standards include:

- STNW1170 Standard for Small IES Connections (Version 10)
- STNW1174 Standard for LV EG Connections (Version 7)
- STNW1175 Standard for HV EG Connections (Version 5)
- STNW3510 Dynamic Standard for Small IES Connections (Version 3)
- STNW3511 Dynamic Standard for LV EG Connections (Version 3)

- STNW3514 Standard for Small IES Connections to Isolated Networks (new and coming soon)
- STNW3515 Standard for LV EG Connections to Isolated Networks (new and coming soon)

4. What changes have been made to the standards?

Key changes to the Embedded Generating system (EG) connection standards include:

- Updates to Battery Energy Storage Systems (BESS) and Vehicle-to-Grid/Vehicle-to-Building (V2G/V2B) sections and definitions to align with the amendment and support the connection of new electric vehicle inverter technology.
- Updated definitions to support ongoing clarity within the standards.

The requirement to comply with AS/NZS 4777.2:2020 Amd 2:2024 with associated performance requirements and settings will automatically apply on 23 August 2025.

5. What if I am connecting to an Isolated Network?

Ergon Energy supplies electricity to 39 isolated communities via microgrids powered by 33 power stations. There are unique technical challenges faced when connecting customer EG systems in these communities. In some communities unmanaged hosting capacities have been exceeded.

We are introducing two standards designed specifically for Isolated Networks. Drafts of these standards STNW3514 and STNW3515 were recently consulted and are anticipated for release in July 2025. If you are wishing to connect to an Isolated Network, the connection will be accommodated under STNW1170 or STNW1174, as relevant, prior to the effective date of the new standards. Where unmanaged hosting capacity limits have been reached, there may be additional technical requirements consistent with current practice.

The finer details

6. If I have a valid connection agreement in place for a AS/NZS 4777.2:2020 Amd 1 compliant inverter before the 23 August 2025, can I install after the 23 August 2025?

Yes. You can install a AS/NZS 4777.2:2020 Amd 1 compliant inverter from 23 August 2025 where the following criteria are met:

- You have a valid connection agreement to the Energex or Ergon Energy distribution network in place for a AS/NZS 4777.2:2020 Amd 1 compliant inverter; and
- The inverter being installed was made in, or imported into Australia before 23 August 2025; and
- The installation occurs within the terms of the connection agreement, including the timeframes.



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It is important to note however, that if you install a AS/NZS 4777.2:2020 Amd 1 compliant inverter from 23 August 2025 that you may not be eligible for small-scale technology certificates (STCs) or large-scale generation certificates (LGCs) for this system. For more information contact the Clean Energy Regulator.

7. What if I do not accept a valid offer for connection agreement for a AS/NZS 4777.2:2020 Amd 1 compliant inverter within the timeframe set out in the connection offer?

If a connection offer was made by Energex or Ergon Energy to an applicant but not accepted within the timeframe, then it will no longer be considered valid. If the applicant still wishes to connect an inverter energy system to the grid, the applicant will need to submit a new application with an AS/NZS4777.2:2020 Amd 2:2024 compliant inverter. A new application will be subject to associated fees and timeframes for processing and technical assessments (where required).

8. What if I do not submit an EWR within the timeframe set out in the connection agreement?

If the EWR is not submitted within the timeframe, the application will be cancelled as the connection contract will no longer be considered valid.

If the applicant still wishes to connect an inverter energy system to the grid, the applicant will need to submit a new application with an AS/NSZ4777.2:2020 Amd 2:2024 compliant inverter. A new application will be subject to associated fees and timeframes for processing and technical assessments (where required).

9. Can I still install a warranty replacement?

An inverter compliant with an earlier version of AS/NSZ 4777.2 can be replaced under warranty where:

- The replacement inverter is the same make and model (like-for-like).
- The replacement is for warranty purposes.
- The inverter is set up to comply with the existing connection agreement.

Applications are required for warranty replacements. Where the above requirements are not met, an AS/NZS 4777.2:2020 inverter compliant with the latest standards will be required.

Installers are required to submit a connect application and receive approval for all replacement inverters, including warranty replacements, prior to connection.



10. What if I have an existing system and want to expand/increase it?

If you have existing inverter/s compliant with an earlier version of AS/NSZ 4777.2, it is possible to add new inverters so long as:

- The existing DER with the earlier version of AS/NSZ 4777.2 compliant inverters is left unchanged (for example, existing DER is a nil-export system and continues to be so); and
- The new inverter/s are AS/NZS 4777.2:2020 compliant to the latest version of the standard; and
- The proposed system meets the standards requirements it is applying to be connected under (for example, phase balancing, aggregate export etc).

Note that all existing and new inverters connected to a dynamic connection are required to meet the requirements of a dynamic connection agreement and the relevant dynamic connection standard.

11. Can I apply to connect a AS/NZS 4777.2:2020 Amd 2 compliant inverter now?

Yes, AS/NZS 4777.2:2020 inverters are already being listed on our Electrical Contractors Portal.

12. How do I know if an inverter is compliant with AS/NZS 4777.2:2020 Amd 2?

Energex and Ergon Energy use listing from the Clean Energy Council to populate the inverters listed in our Customer Portals. The product list will not show which inverters have demonstrated compliance to AS/NZS 4777.2:2020 Amd 2 prior to 23 August 2025.

On 23 August 2025, any relevant inverter for which a compliance declaration to AS/NZS 4777.2:2020 Amd 2 has not been provided and verified by the Clean Energy Council, will be removed from the product list.

See the Clean Energy Council website for more [information](#) and to [view inverters](#) approved to the updated standard.

13. Can a AS/NZS 4777.2:2020 Amd 1 inverter being installed on site be made compliant to AS/NZS 4777.2:2020 Amd 2:2024 by running a firmware upgrade on the day of installation?

No. It is a requirement under section 191 of the Electrical Safety Regulation that an electrical product being sold in Queensland must be compliant with the relevant safety standards for the product when manufactured or imported. In Queensland it is requirement that a person must only sell AS/NZS 4777.2:2020 Amd 2:2024 compliant inverters from 23 August 2025. Therefore, from 23 August 2025, any firmware updates to AS/NZS 4777.2:2020 Amd 2:2024 must be completed prior to sale.

14. I have a 2015 inverter already installed with a connection agreement; can I upgrade the firmware to AS/NZS 4777.2:2020 Amd 2:2024?

You would need to apply for a new connection agreement and ensure that the entire system complies with the latest applicable connection standard.



Once you have received a new connection agreement and the site is compliant with all other requirements, the solar installer is able to upgrade your firmware.

15. What are the compliance requirements for EG systems applications that are covered up to and including 30 kVA under STNW1174?

The standard STNW1170 only covers basic, or Model Standing Offer (MSO), connections. Applications for negotiated connections up to and including 30 kVA are covered under STNW1174 are required to meet additional compliance requirements aligned with existing process for connecting an application under STNW1174.

As part of the submission process the application will be required to make the following acknowledgement:

“The Proponent declares the design and the commissioning for the EG installation has or will be carried out under engineering supervision by a Registered Professional Engineering of Queensland (RPEQ). A copy of these RPEQ certified design and commissioning records shall be made available to the DNSP on request. The installation complies with the requirements of STNW1174.”

Any further questions?

Contact us at the below email addresses should you have any questions.

Energex: energexgeneration@energyq.com.au

Ergon Energy: ergongeneration@energyq.com.au



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