

Periodic inverter testing

What is 'islanding'?

Islanding is where the inverter continues to supply power into the electricity distribution network during an outage, creating a serious safety issue.

Islanding causes an 'island' of live power in an otherwise deenergised section of the network. Islanding creates safety issues for Evoenergy personnel working on the network or private electrical contractors working inside the property, that could lead to injury or death. Islanding also interferes with network power quality and can cause damage to equipment and appliances.

What is anti-islanding protection?

Anti-islanding protection ensures that the inverter is automatically disconnected from the network when there's a power interruption.

Why is there a requirement to test?

Inverters must be tested at least once every five years to ensure they are safe for Evoenergy personnel, electrical contractors, and the public. Testing can also help to avoid damage to the network, home appliances and minimise power quality issues.

All owners that have an inverter at their property agreed to test their inverter every five years during the application process, and testing is required to comply with the Evoenergy Micro Embedded Generation Technical Requirements and Evoenergy LV Embedded Generation Technical Requirements.

The inverter was already installed when I moved in, what happens now?

As the new owner of the property, you are responsible for ensuring that your inverter installation adheres to Evoenergy's rules, requirements and contractual obligations. If you're renting, inverter testing is the responsibility of the property owner.

Who can test my inverter?

Any licensed electrician can test your inverter. You can contact to the company who installed your solar panels who often have qualified staff offering this service, or you can find a list of Clean Energy Council accredited installers at www.solaraccreditation.com.au/consumers/find-an-installer.html who hold an electrician licence. Evoenergy do not perform inverter testing.

How long does the test take and how much does it cost?

The test is normally quick and should take around 15 to 30 minutes. It may take longer if problems are found, or if you have more than one inverter to test. The licenced electrician can provide a quote before the testing is undertaken.

Can I do the test myself?

No, you cannot do the test yourself. Inverter testing involves working with dangerous voltages and can only be completed by a licenced electrician.

If I cannot have the test done within 60 days, what should I do?

You will need to contact Evoenergy and tell us why the test cannot be done. Under certain circumstances we may grant an extension.

How do I know if my inverter is ok?

The licenced electrician will tell you the results and let you know if any further action is required.

What if my inverter fails the test?

Your inverter may fail if it takes too long to disconnect after a power interruption, or if it reconnects too quickly after power is restored.

If your inverter fails the testing process you will need to organise for the equipment to be replaced or repaired and then have it retested. You should also review the terms of your warranty with the installer who performed your installation. If in the opinion of Evoenergy the inverter is unsafe, your inverter will be disconnected and you will be advised in writing of the reasons for disconnection.

If I alter my installation, do I need to advise someone?

Yes, your installer must notify Evoenergy and the Environment and Sustainable Development Directorate (ESDD) before any alteration.

What do I do with the test forms?

The licenced electrician will perform the test, fill out the forms and then email the test results to Evoenergy. You will also be given a copy of the form for your records. We encourage you to keep all test records related to the inverter while the inverter continues to remain in service and connected to the network.