

Victoria Emergency Backstop Troubleshooting guide.

⇒ Introduction:

Effective October 1, 2024, all inverters installed in Victoria (VIC) will be required to comply with the VIC Emergency Backstop regulations. For further information regarding this mandate, please refer to the official VIC Energy website: [Victoria's Emergency Backstop Mechanism for Solar](#).

As per the new regulations, all inverters must be equipped with remote control capabilities and export limit devices. These devices must be capable of responding to export limiting commands from Distribution Network Service Provider (DNSP) servers. Please check the [Connection steps here](#).

The regulations apply to all VIC DNSPs, including:

- Powercor / Citipower / United Energy
- Ausnet
- Jemena

⇒ Compatibility of FoxESS Inverters with VIC Backstop Program:

All current FoxESS inverters, including both grid-tied and hybrid models, are equipped with a built-in cloud-based aggregator, making them compatible with the VIC Emergency Backstop program.

To successfully pass the test with Distribution Network Service Providers (DNSPs), all FoxESS inverters must be connected to **Either a CT (Current Transformer) or a Meter**. It is essential that only FoxESS-provided CTs and meters are used; third-party devices are not supported. The specific model numbers for the meters and CTs provided by FoxESS are as follows:

- Meter: DDSU666 (Ensure the device has "FOX" written on it)
- CT: CTSA016-100A

⇒ Process to Follow to Pass DNSP's test

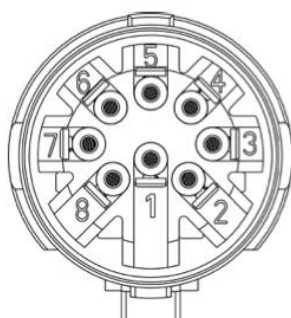
1. Meter or CT connection with the Inverters.

All FoxESS grid-tied and hybrid inverters must be connected to either a Current Transformer (CT) or a meter.

For grid-tied inverters:

- The CT is connected to the inverter communication connector, with the red cable connected to terminal 1 and the black cable connected to terminal 2.
- The meter is connected to terminals 3 and 4, with terminal 7 of the meter connected to terminal 4 of the inverter connector and terminal 8 of the meter connected to terminal 3 of the inverter connector.

Please refer to the image below for further clarification.



| PIN | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|------------|-----|-----|------------|------------|-----|------|----|-------|
| Definition | CT+ | CT- | METER 485- | METER 485+ | GND | DRM0 | NC | ESTOP |

For Hybrid inverters:

- The primary CT is connected to terminals 7 and 8, with the red cable connected to terminal 8 and the black cable connected to terminal 7.
- There is also a secondary CT option, which can be used for AC coupling with another solar inverter.
- The meter is connected to terminals 1 and 2, with terminal 7 of the meter connected to terminal 1 and terminal 8 of the meter connected to terminal 2.

Please refer to the image below for further clarification.



| PIN | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|------------|-----------|-----------|------|------|------|------|------|------|
| Definition | Meter485A | Meter485B | 485B | 485A | CT2+ | CT2- | CT1- | CT1+ |

2. Make sure the inverter is Online.

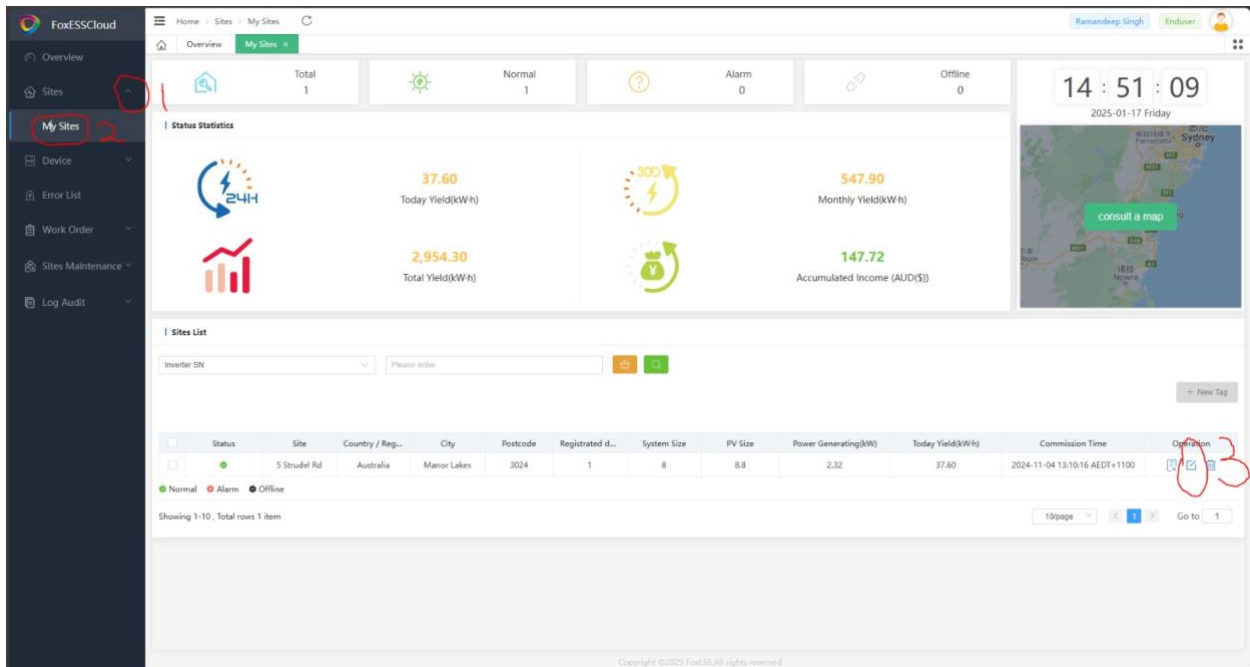
Please follow the [Wi-Fi Troubleshooting](#) document to connect the Wi-Fi of the house to the inverter.

If the installer is having any issue with connecting Wi-Fi, please call on FoxESS Support line.


3. To add the NMI number on FoxESSCloud.com follow these steps:

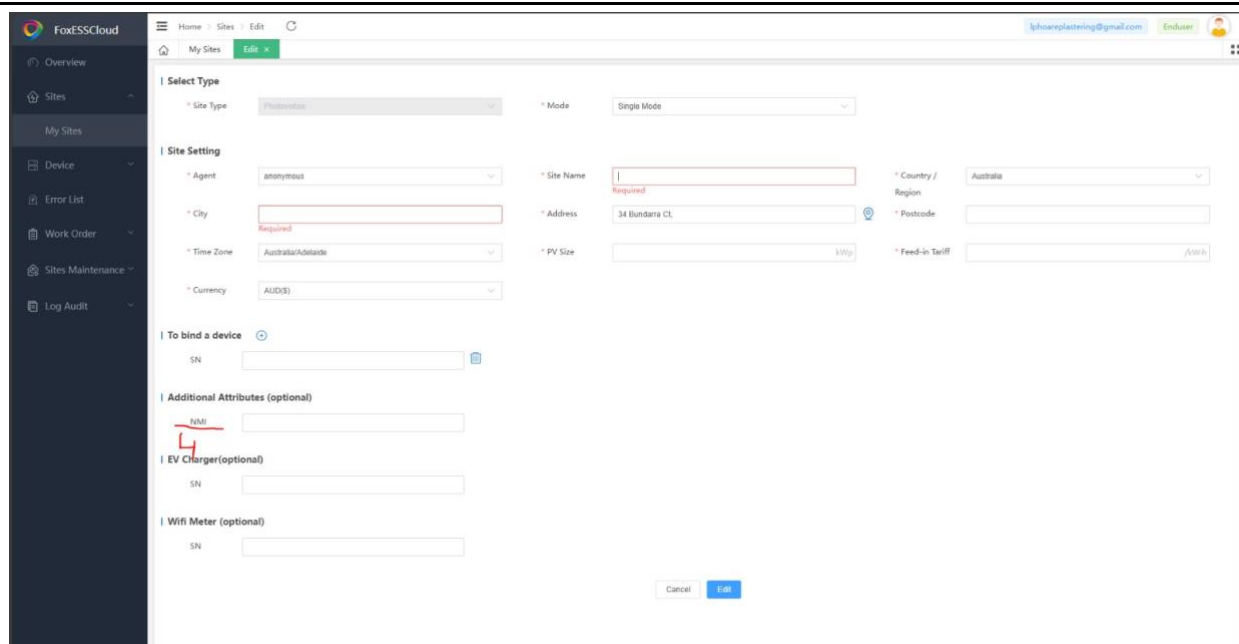
- **Navigate to the "Sites" Menu,** On the left-hand side of the portal, select **"My Sites"** from the dropdown menu under **"Sites."**
- **Locate the Desired Site,** In the **"My Sites"** section, find the relevant site in the **"Sites List"** table. You can use the **search box** to filter by **Inverter Serial Number (SN)** or locate it manually.
- **Edit Site Details,** In the **"Operation"** column of the selected site, click the **Edit (pencil)** icon to open the site details.
- **Enter the NMI Number,** Scroll down to the **"Additional Attributes (Optional)"** section. Enter the **NMI number** in the **"NMI"** field.
- **Save Changes,** Click the **"Edit"** button at the bottom to save the changes.

Please refer to the attached image for further guidance.



The screenshot displays the FoxESSCloud user interface. On the left sidebar, the 'My Sites' menu item is circled in red and labeled with a red '2'. The main dashboard area shows 'Status Statistics' with four key metrics: Today Yield (37.60 kWh), Monthly Yield (547.90 kWh), Total Yield (2,954.30 kWh), and Accumulated Income (147.72 AUD/\$). Below the statistics is the 'Sites List' table, which contains one entry for a site in Australia. In the 'Operation' column of this table, the 'Edit' icon (a pencil) is circled in red and labeled with a red '3'.

| Status | Site | Country / Reg... | City | Postcode | Registered d... | System Size | PV Size | Power Generating(kW) | Today Yield(kWh) | Commission Time | Operation |
|--------|-------------|------------------|-------------|----------|-----------------|-------------|---------|----------------------|------------------|-------------------------------|---|
| Normal | 5 Stroud Rd | Australia | Manor Lakes | 3024 | 1 | 8 | 8.8 | 2.32 | 37.60 | 2024-11-04 13:10:16 AEDT+1100 |  |



Please note the firmware on the inverter needs to be up to date. Please call on the support line to confirm if the inverter has the updated firmware version.

⇒ DNSP capability test.

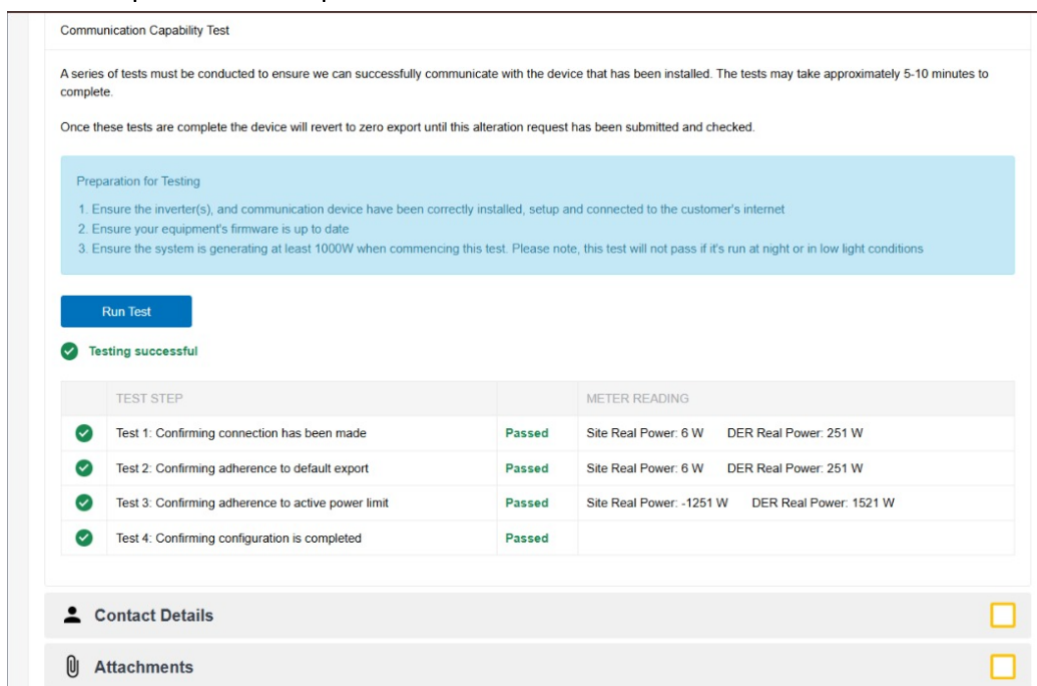
Below is the training link with each DNSP for installers to pass capability test smoothly.

Powercor and Citipower- [Powercor Troubleshooting document](#)

United- [United Troubleshooting document](#)

Jemena- Jemena.com.au

Below is the example of the test passed with Powercor which is like Ausnet and Jemena.



Communication Capability Test

A series of tests must be conducted to ensure we can successfully communicate with the device that has been installed. The tests may take approximately 5-10 minutes to complete.

Once these tests are complete the device will revert to zero export until this alteration request has been submitted and checked.

Preparation for Testing

1. Ensure the inverter(s), and communication device have been correctly installed, setup and connected to the customer's internet
2. Ensure your equipment's firmware is up to date
3. Ensure the system is generating at least 1000W when commencing this test. Please note, this test will not pass if it's run at night or in low light conditions

Run Test

Testing successful

| TEST STEP | | METER READING |
|--|--------|---|
| Test 1: Confirming connection has been made | Passed | Site Real Power: 6 W DER Real Power: 251 W |
| Test 2: Confirming adherence to default export | Passed | Site Real Power: 6 W DER Real Power: 251 W |
| Test 3: Confirming adherence to active power limit | Passed | Site Real Power: -1251 W DER Real Power: 1521 W |
| Test 4: Confirming configuration is completed | Passed | |

Contact Details ☐

Attachments ☐