

Solis Technical Board – Victoria Emergency Backstop Instruction

Dear Solis Customers,

Regarding registration and capability tests of Solis inverters to VIC DNSPs, we found that most sites failed to register due to missing smart meter configurations.

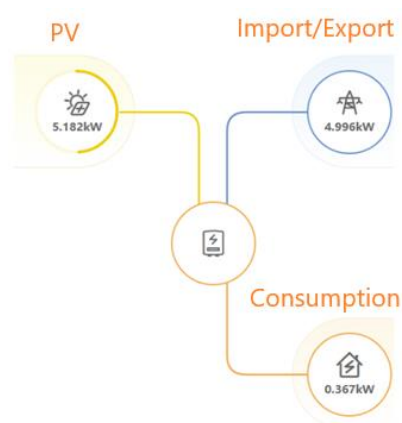
Only a small number of sites require further investigation from the 3rd party aggregator and DNSP tech support to pass all tests.

We apologize for the inconvenience caused by this temporary issue. Please follow the 4-Steps instructions below and contact Solis service on **0385559516** / service@solisinverters.com.au for further assistance.

1- Make sure Meter and Internet are connected well while onsite

The Victorian government requires meter and internet connectivity for Emergency Backstop control. We have observed that most Solis installations failed due to an unconfigured meter. It is essential for all installers in VIC to configure the meter before leaving the site.

To verify this, simply ensure that the **flow chart is visible** in the SolisCloud app, showing the correct import/export power. Please refer to Appendix A for compatible meter and inverter model, and Appendix B&C for meter wiring and configuration.



2- Select VIC DNSP on SolisCloud APP

Please ensure **Agent** is selected as **VIC DNSPs** while creating a site on SolisCloud platform so the data can be passed through correctly.

* NMIⓄ

Input NMI

Agent

Choose Agent for Flexible Export Only

Organization CodeⓄ

0A6089 Search

Datalogger SN

Add datalogger SN

Agent

Choose Agent for Flexible Export Only

WA

SAPN

VIC DNSPs

OTHERS

3- Configure Default Export Limit and take a screenshot

Set the default export limit according to the following for each DNSP and capture a screenshot as proof as part of grid connection requirement. Below the default limits in VIC:

- CitiPower/PowerCor/United Energy: as per pre-approved, or 0W if not specified in preapproval
- AusNet: 1000W
- Jemena: 500W





Please refer to Appendix C for export limitation setting

4- Register and Start the Capability Test on the DNSP Portal While Onsite

Please remain onsite for registration and try capability test. Please refer to Q&A in Appendix D for common errors you may encounter.

If the capability test fails 3 times continuously you may inform us and leave the site. We will assist remotely.

Appendix A – Compatible inverter models and meter/inverter compatibility table

Meter models Inverter models	Acrel 1ph meter ACR10R-D16TE	Eastron 1ph meter SDM120CTM	Acrel 3ph meter DTSD1352	Eastron 3ph meter SDM630MCT
				
S5-GR1P(1-3)K-M	✓			
S5-GR1P(3-6)K	✓			
S6-GR1P(3-6)K-S (Meter)	✓	✓		
S6-GR1P(3-6)K-S (CT)				
S5-GR1P(7-10)K	✓	✓		✓
S5-GR3P(5-20)K-AU			✓	✓
S6-GR3P(5-10)K03-NV-ND-AU			✓	✓
S5-GC(25-50)K-AU			✓	✓
S5-GC(50-70)K			✓	
S5-EH1P(3-6)K-L	✓	✓ (incl.)		✓
S6-EH1P(3-6)K-L-AU		✓ (incl.)		
S6-EH1P(3-8)K-L-PLUS-AU		✓ (incl.)		
S6-EH3P(5-10)K-H-AU				✓ (incl.)

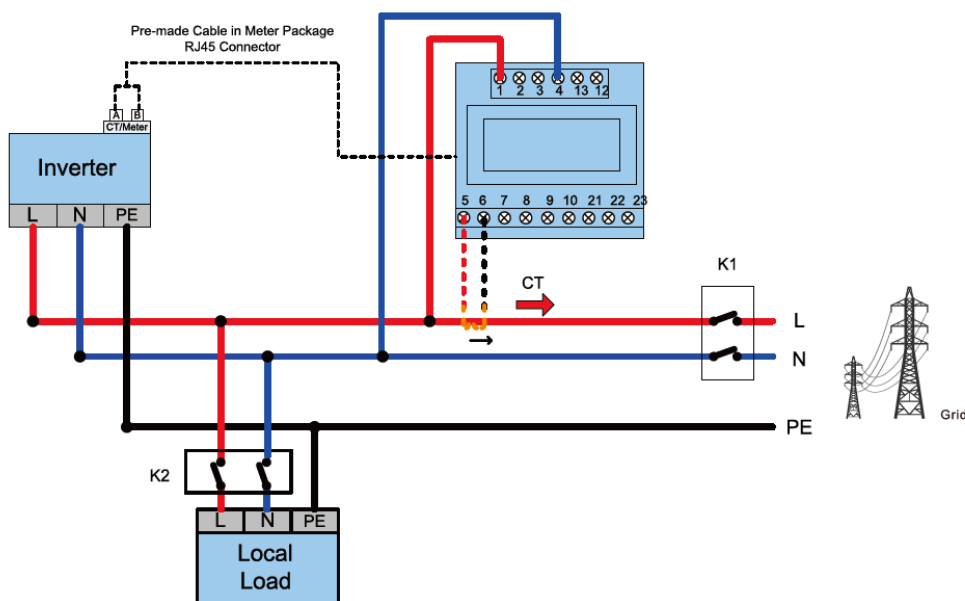
Appendix B – meter wiring diagram

B.1- Acrel meter single phase meter – ACR10R-D16TE

The Single phase meter



System drawing

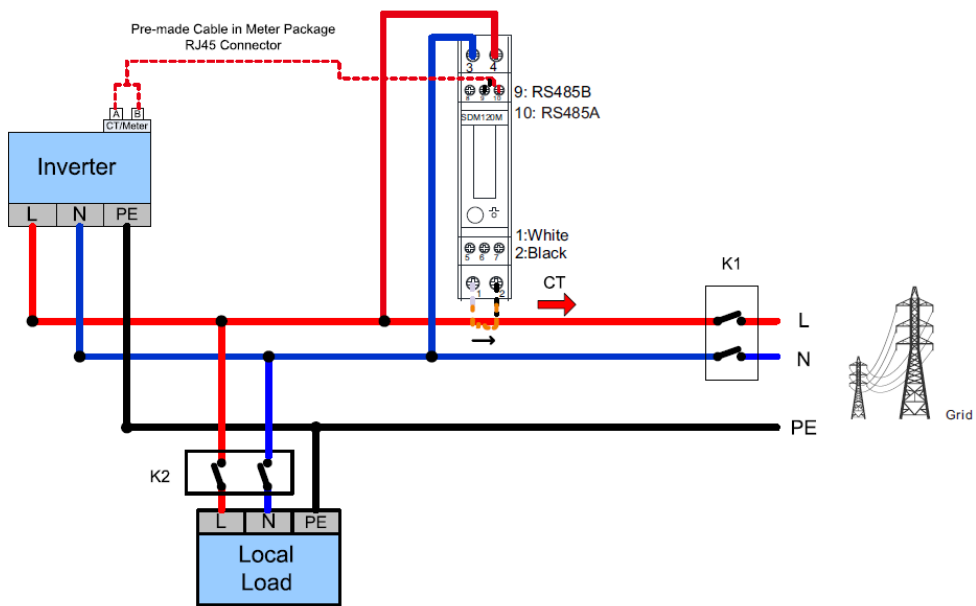


B.2- Eastron single phase meter - SDM120CT

The Single phase meter



System drawing

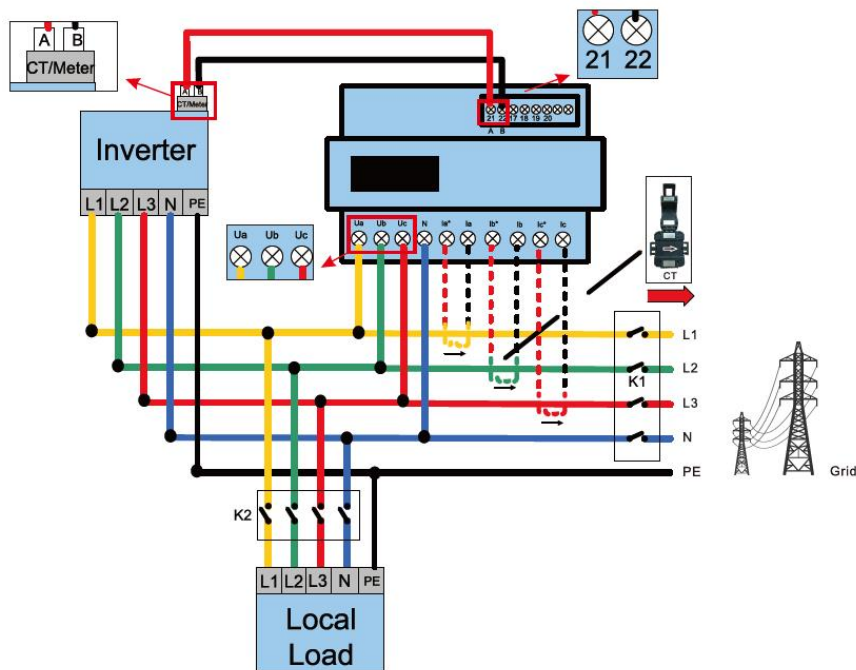


B.3- Acrel three phase meter - DTSD1352

The three-phase meter with CTs



System drawing

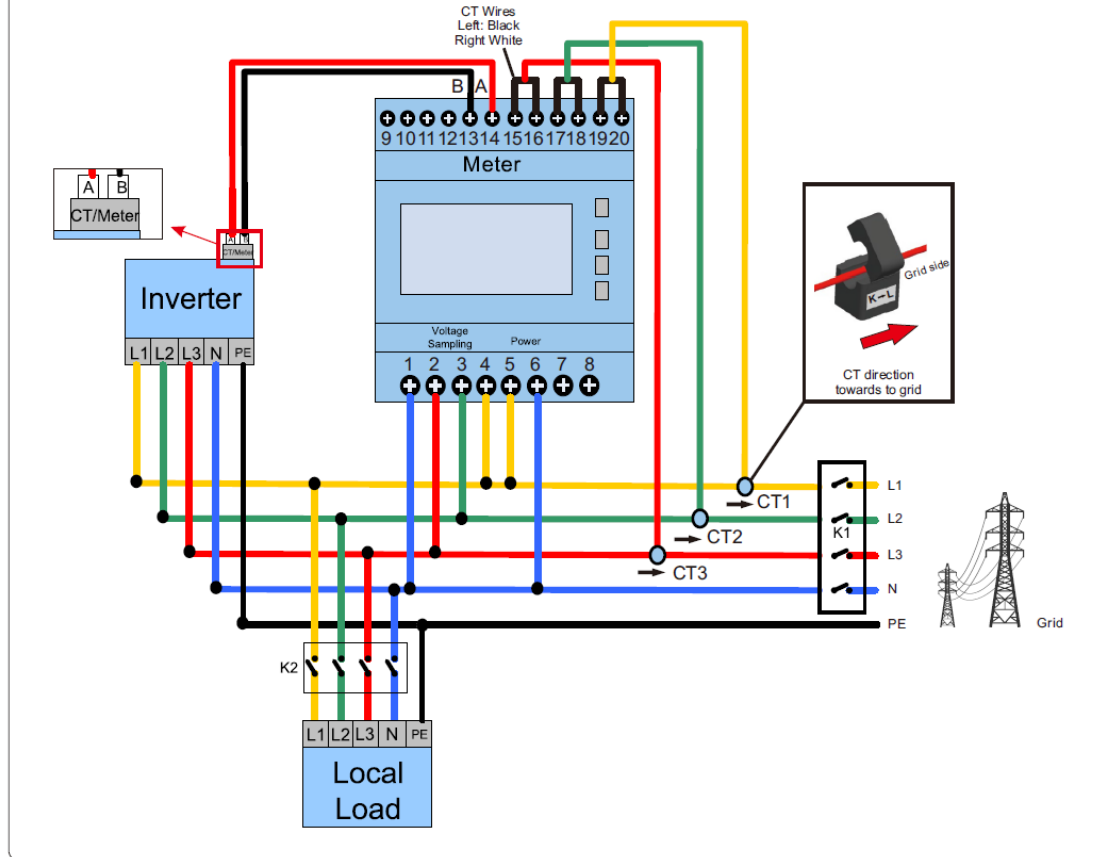


B.4- Eastron three phase meter - SDM630MCT

The three-phase meter with CTs



System drawing



Appendix C – Meter configuration

C.1 - Meter configuration S5 Grid-Tie inverters

Inverter models include:

S5-GR1P(1-3)K / S5-GR1P(3-6)K / S5-GR1P(7-10)K

S5-GR3P(5-20)K-AU / S5-GC(25-50)K-AU



1-press ENTER button to wakeup the screen

2-press DOWN button to navigate to *Advanced Setting*

3-enter password 0010 by entering DOWN-> DOWN-> UP-> ENTER

From *Advanced Setting* ->

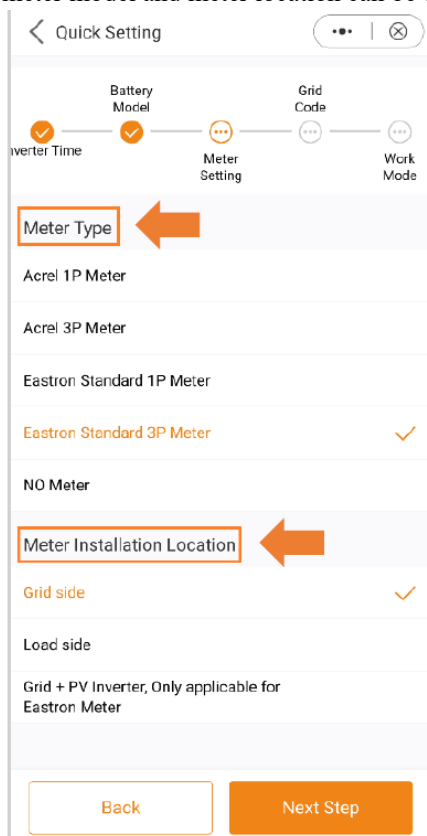
- a) Config meter location:
Internal EPM Set->Mode Select->Meter in Grid
- b) Config meter model:
Internal EPM Set->Meter Select->1PH Meter or 3PH Meter -> (select meter model respectively)
- c) Config export limitation
Internal EPM Set-> Soft Hard Lmt set->Soft Backflowpower-> (enter export limitation value)

C.2 - Meter configuration for S6 Grid-Tie inverters

Inverter models include:

S6-GR1P(3-6)K-S / S6-GR1P(5-10)K3-NV-ND-AU

meter model and meter location can be configured under *Quick setting* during initial commissioning

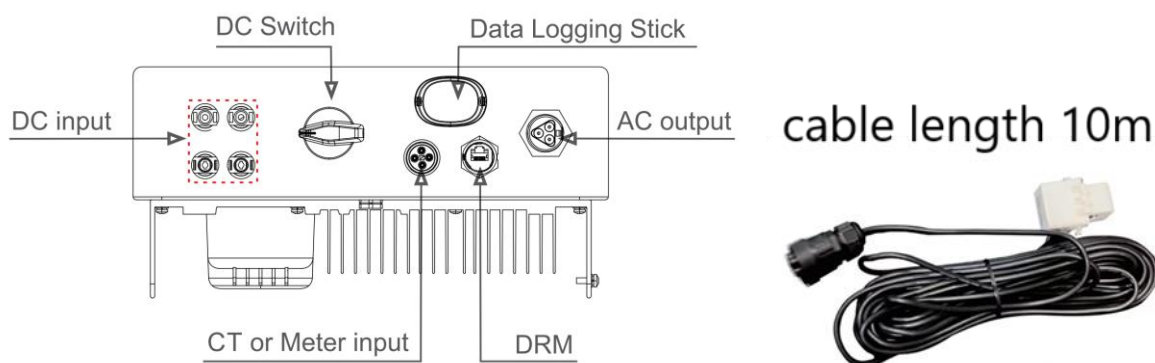


They can also be configured later by following below menu path:

- a) Config meter location:
Settings -> EPM Setting -> Built-in EPM Setting->Built-in EPM mode selection->Meter in Grid Mode
- b) Config meter model:
Settings -> EPM Setting -> Meter Selection->(select meter model respectively)
- c) Config export limitation
Settings -> EPM Setting -> Built-in EPM Setting-> System Export Power Limit Value-> (enter export limitation value)

C.3 - CT configuration for CT type of S6-GR1P(3-6)K-S inverters

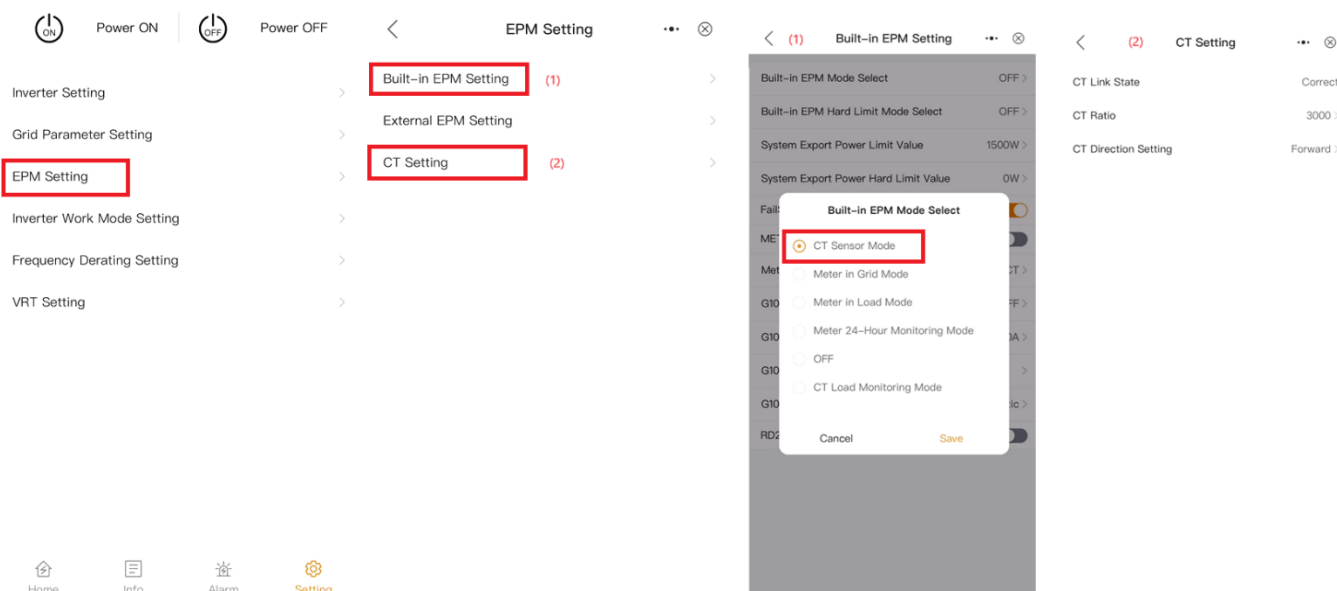
Solis S6-GR1P(3-6)K-S inverter has 10-meter-long CT included in inverter box. It supports VIC backstop control with CT only, meter is not required.



You will find CT/Meter labelled at the bottom of inverter.

Please config CT by following path:

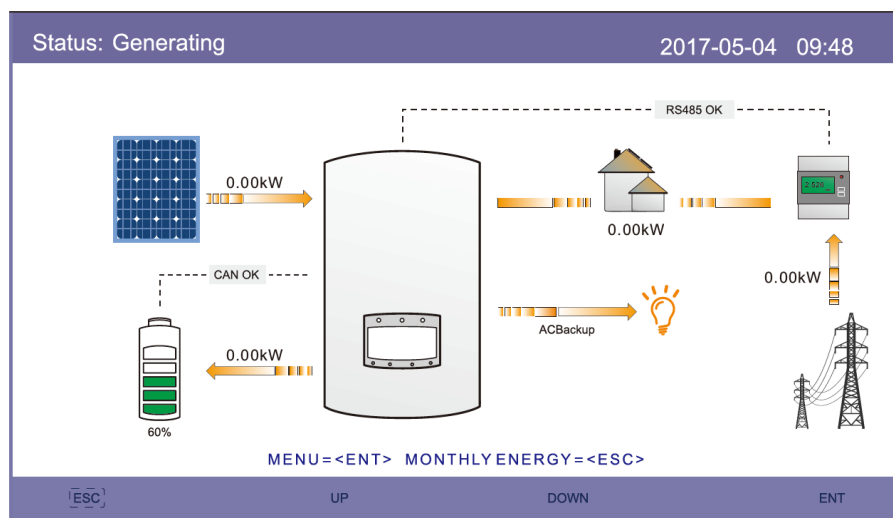
- Config meter location:
EPM Setting -> Built-in EPM Setting->Built-in EPM mode selection->CT Sensor Mode
- Config CT Ratio:
EPM Setting -> CT Setting->CT Ratio 3000
- Config export limitation
Settings -> EPM Setting -> Built-in EPM Setting-> System Export Power Limit Value-> (enter export limitation value)



C.4 - Meter configuration for S5 Hybrid inverters

Inverter models include:

S5-EH1P(3-6)K-L



1-press ENTER button and press DOWN button to navigate to *Advanced Setting*

2-enter password 0010 by entering DOWN-> DOWN-> UP-> ENTER

From *Advanced Setting* ->

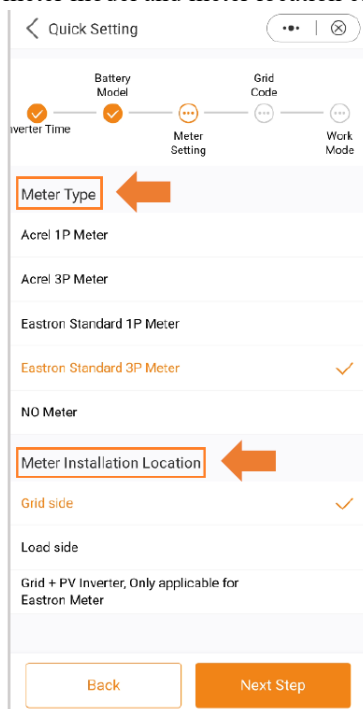
- a) Config meter model:
Storage Energy Set -> Meter Set -> Meter Select -> (Choose the corresponding meter model)
- a) Config meter location:
Storage Energy Set -> Meter Set -> Meter Placement -> Grid
- b) Config export limitation
Export Power Set -> (enter the export limitation value)

C.5 - Meter configuration for S6 Hybrid inverters

Inverter models include:

S6-EH1P(3-6)K-L-AU / S6-EH1P(3-8)K-L-PLUS-AU / S6-EH3P(5-10)K-H-AU

meter model and meter location can be configured under *Quick setting* during initial commissioning



They can also be configured later by following below menu path:

- a) Setup meter model:
Home page ->Advanced Settings -> Meter/CT Setting-> Meter Type->(select meter model respectively)
- b) Setup meter location:
Home page ->Advanced Settings -> Meter/CT Setting-> Meter Location ->Meter in Grid
- c) Setup export limitation
Home page->Storage Mode->enable "Allow export"-> fill-in "Max export power"

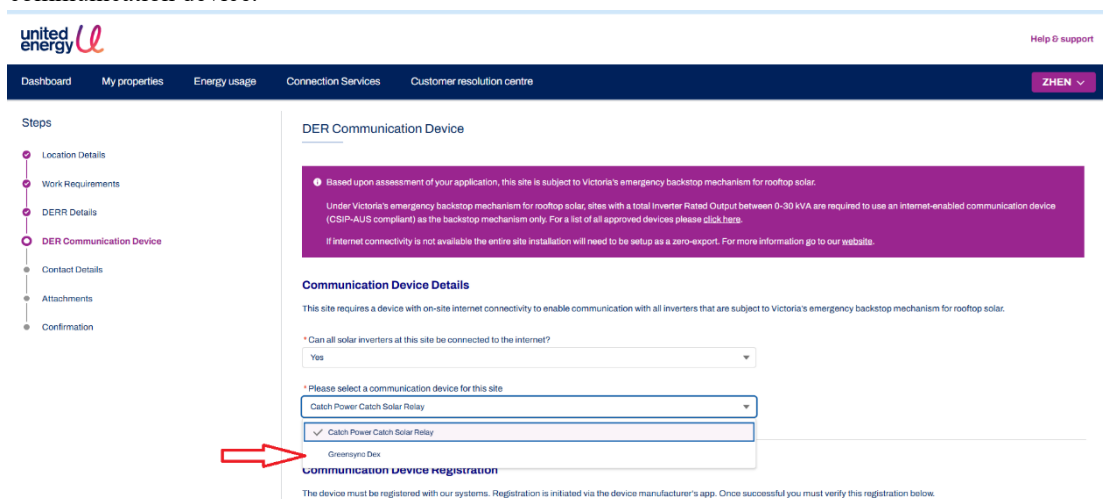
Appendix D - Frequently Asked Questions:

Q1:

Where can I get LFDI ?

A:

Unlike other inverter brands, Solis inverters communicate to DNSP through a third-party aggregator called *Greensync Dex*. -For CitiPower, PowerCor, United Energy, and AusNet, the LFDI is not required. Simply select Greensync Dex as the communication device.



The screenshot shows the United Energy website interface for DER Communication Device selection. The page title is "DER Communication Device". A purple banner states: "Based upon assessment of your application, this site is subject to Victoria's emergency backstop mechanism for rooftop solar. Under Victoria's emergency backstop mechanism for rooftop solar, sites with a total Inverter Rated Output between 0-30 kVA are required to use an internet-enabled communication device (CSP-AUS compliant) as the backstop mechanism only. For a list of all approved devices please click here. If internet connectivity is not available the entire site installation will need to be setup as a zero-export. For more information go to our website." Below this, the "Communication Device Details" section states: "This site requires a device with on-site internet connectivity to enable communication with all inverters that are subject to Victoria's emergency backstop mechanism for rooftop solar." A question asks: "Can all solar inverters at this site be connected to the internet?" with a dropdown menu set to "Yes". Another question asks: "Please select a communication device for this site" with a dropdown menu showing "Catch Power Catch Solar Relay" selected. Below this, a checkbox is checked for "Catch Power Catch Solar Relay" and "Greensync Dex" is listed as an option. A red arrow points to "Greensync Dex". Below the dropdown is the "Communication device registration" section, which states: "The device must be registered with our systems. Registration is initiated via the device manufacturer's app. Once successful you must verify this registration below."

Please note "GreenSync" option is not yet available on Jemena website. Please email us with the site detail and we will provide LFDI for registration within 3 days.

Q2:
I get “Verification failed” error, what should I do?

Communication Device Registration

The device must be registered with our systems. Registration is initiated via the device manufacturer's app. Once succes

Please note some manufacturer's apps do not currently support direct device registration. Where direct device registratic
Form Device Identifier (LFDI), which you must copy & paste, or manually enter into the field below.

Next Steps:

1. Ensure the inverter(s) have been correctly installed and setup
2. Ensure your equipment is connected to the internet and is running the latest firmware
3. Refer to your OEM installation guide on how to use their software/app to initiate the registration process
4. Finalise device registration below

* Has the device registration been initiated successfully via the manufacturer's app?

Yes

Verify Registration

✘ Verification failed. Please try again. If this problem persists, please contact us.

A:
It means the inverter is not compatible with backstop control. Please follow the check points in this document such as meter / internet / “VIC DNSP” selection etc.

Q3:
I get “Test 2 fail” or “Test 3 fail” error, what should I do?

Run Test

✘ Test failed, please try again. If the problem persists please contact us on 1800 772 940.

TEST STEP	
✔	Test 1: Confirming connection has been made Passed
✔	Test 2: Confirming adherence to default export Passed
✘	Test 3: Confirming adherence to active power limit Control execution error. Check device and site settings or restart device and try again
	Test 4: Confirming configuration is completed Pending

✘ Test failed, please try again. If the problem persists please contact us on 1800 772 940.

TEST STEP	
✔	Test 1: Confirming connection has been made Passed
✘	Test 2: Confirming adherence to default export Communication issue. Check device settings or restart device and try again.
	Test 3: Confirming adherence to active power limit Pending
	Test 4: Confirming configuration is completed Pending

- A:**
- 1-please make sure to conduct the test on a sunny day
 - 2-please re-try test 3 times while onsite. If it keeps failing, please make sure the inverter is programed with default export limit before leaving the site
 - 3-we encourage you to re-try test while in office because the test can pass after multiple retries. Please contact us with NMI code and a screenshot of the fault for further assistance.