



# **APPLICATION GUIDE:** **SA GOV SMARTER HOMES** **SAPN /FRONIUS - REMOTE DISCONNECT** **SETUP**

as of 28<sup>th</sup> Sept 2020

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Application Guide

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Version 3.0/2020

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Gender-specific wording refers equally to female and male form.

## 1. GENERAL

This Application Guide describes the procedure to setup a Fronius inverter system to comply with the SA Smarter Homes regulation of remote disconnect/reconnect when selecting the “**SA Power Networks / Fronius – Fronius – API control of internet connected Fronius**” Relevant Agent option.

**\*\*\*NOTE:** The SAPN / Fronius API control solution is NOT compatible with the **Symo Hybrid** series OR the **GEN24** series inverter range. An alternate Relevant Agent will need to be chosen for these inverter series.

## 2. END CUSTOMER ONBOARDING

In order to on-board the PV system Owner / Operator for compliance to the Remote disconnect / reconnect requirement the SEG applicant is required to get consent from the system Owner.

### 2.1 SEG application

When filling out the SEG Application:

- select **SA Power Networks** as the Relevant Agent
- select **Fronius – API control of internet connected Fronius Inverters** as the relevant technology



Installation type	<h3>Embedded generation</h3> <h4>Installation details</h4> <p><b>Relevant Agent details</b></p> <p>Select the Relevant Agent for the electricity generating plant. Information on Relevant Agents and their compatible technology is listed on the OTR website available <a href="#">here</a>.</p> <p>* Select the Relevant Agent</p> <p>SA Power Networks</p> <p>* Select the relevant technology</p> <ul style="list-style-type: none"> <li><input type="radio"/> Alpha ESS - API control of internet connected Alpha ESS inverters</li> <li><input type="radio"/> Fronius - API control of internet connected Fronius inverters</li> <li><input type="radio"/> Ginlong Solis - API control of internet connected Ginlong Solis inverters</li> <li><input type="radio"/> Goodwe - API control of internet connected Goodwe inverters</li> <li><input type="radio"/> Greensync - API control of internet connected Goodwe, Sungrow and Growatt inverters via the Greensync.deX platform</li> <li><input type="radio"/> Huawei - API control of internet connected Huawei inverters</li> <li><input type="radio"/> Mondo - Internet connected Mondo Ubi IoT device connected to supported inverters via Modbus</li> <li><input type="radio"/> Redback Technologies - API control of internet connected Redback inverters</li> <li><input type="radio"/> SCADA Control - Suitable for electricity generating plants with a capacity of more than 200kW</li> <li><input type="radio"/> SMA - API control of internet connected SMA inverters</li> <li><input type="radio"/> SolarEdge - API control of internet connected SolarEdge inverters</li> <li><input type="radio"/> Sungrow - API control of internet connected Sungrow inverters</li> <li><input type="radio"/> SwitchDin - Internet connected SwitchDin Droplet device connected to supported inverters via Modbus</li> <li><input type="radio"/> Internet connected Wattwatchers Auditor 6M or 6W device with contactor switching for all inverters, or connected to inverters DRM port for supported models</li> </ul> <p><input type="checkbox"/> By checking this box you confirm to SA Power Networks that:</p> <ul style="list-style-type: none"> <li>the Customer is <b>aware and agrees</b> to appoint SA Power Networks as their <b>Relevant Agent</b> on the <a href="#">Relevant Agent Appointment Terms and Conditions</a> for the generating plant selected on this application;</li> <li>the <b>Customer has authorised you</b> to agree on their behalf to the appointment on those terms and conditions;</li> <li>you appoint SA Power Networks as the Relevant Agent for the Customer on the terms and conditions described above; and</li> <li>you are aware that SA Power Networks will rely on this confirmation in performing the role of Relevant Agent under the Electricity Act 1996 (SA) and regulations made thereunder;</li> <li>you confirm the system will be installed and commissioned in accordance with the instructions from the Technology Provider to allow SA Power Networks to perform their role of the Relevant Agent.</li> </ul> <p><small>Customer means the person(s) named in this application. Relevant Agent has the meaning given to that term in the Electricity Act 1996 (SA) and regulations made thereunder.</small></p> <p><a href="#">Back</a> <a href="#">Next</a></p>
Customer details	
<b>Installation details</b>	
Inverter details	
Total generation capacity	
Relevant Agent details	
Confirm and submit	
Receipt	

### 3. ONSITE INVERTER SETUP

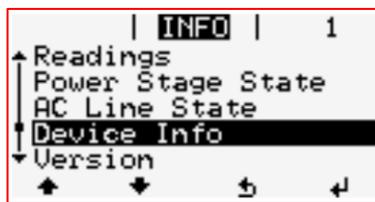
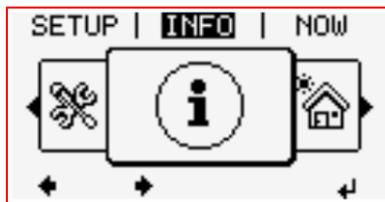
#### 3.1 Inverter SW Update

In order to comply with the VRT requirement the inverter must have minimum the following Country Setup version and setting:

**Setup**            **AUS5 (AUS5 – SA)**  
**Version**        **1.1.2.0**

If the Setup Version is lower than **1.1.2.0**, then an inverter USB or Solarweb software update is required and after the update, the country setup reloaded with the code **73887**.

The country setup version can be checked on the inverter display under:  
**INFO → Device Info → Country Setup.**

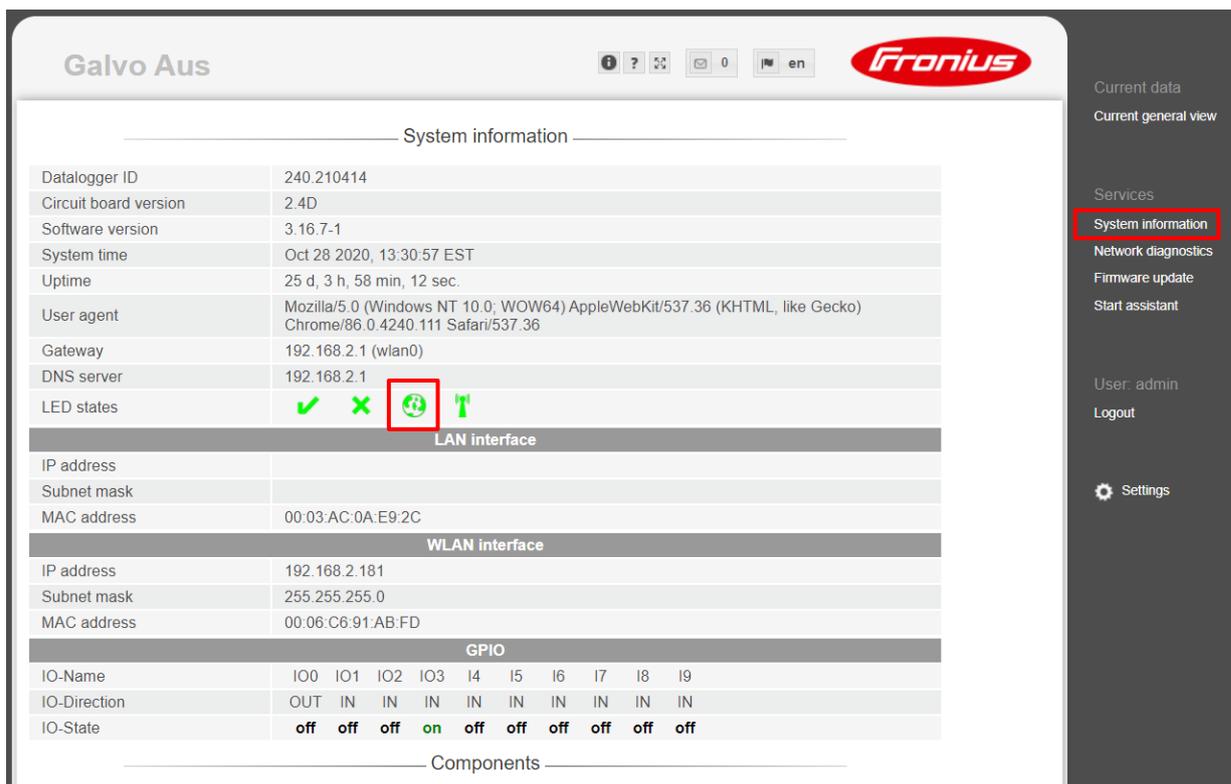


#### 3.2 Datamanager configuration

Commission and configure the Datamanager as per the normal process so that the Inverter has an internet connection and communication to Solarweb. *For information on this procedure, please see our other online Quick Guides for information*

The Installer **MUST** check & confirm the Datamanager has a valid connection to Solarweb by:

1. Checking the LED status on the Datamanager WebUI. Solarweb symbol should be GREEN 



The screenshot shows the 'System information' section of the web interface. The 'LED states' row contains four icons: a green checkmark, a red X, a green Solarweb symbol (circled in red), and a green T. Below this, the LAN and WLAN interface details are listed.

System information	
Datalogger ID	240.210414
Circuit board version	2.4D
Software version	3.16.7-1
System time	Oct 28 2020, 13:30:57 EST
Uptime	25 d, 3 h, 58 min, 12 sec.
User agent	Mozilla/5.0 (Windows NT 10.0; WOW64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/86.0.4240.111 Safari/537.36
Gateway	192.168.2.1 (wlan0)
DNS server	192.168.2.1
LED states	✓ ✗ <span style="border: 1px solid red; border-radius: 50%; padding: 2px;">🌐</span> T
LAN interface	
IP address	
Subnet mask	
MAC address	00:03:AC:0A:E9:2C
WLAN interface	
IP address	192.168.2.181
Subnet mask	255.255.255.0
MAC address	00:06:C6:91:AB:FD
GPIO	
IO-Name	I00 I01 I02 I03 I4 I5 I6 I7 I8 I9
IO-Direction	OUT IN IN IN IN IN IN IN IN IN
IO-State	off off off on off off off off off off

OR

2. Visual check of Solarweb LED  directly on the Datamanager card



## 4. SOLARWEB CLOUD SETUP

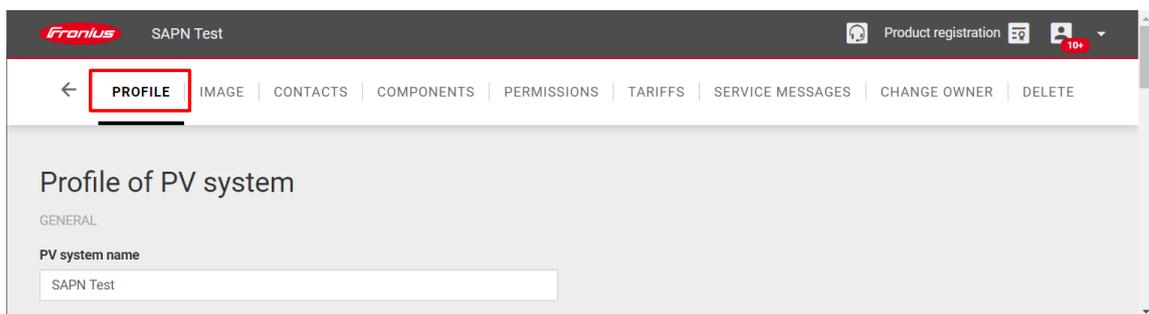
### 4.1 Create system in Solarweb

Create a new system in Solarweb as per the standard process. The inverter MUST have a valid connection to Solarweb to be compliant.

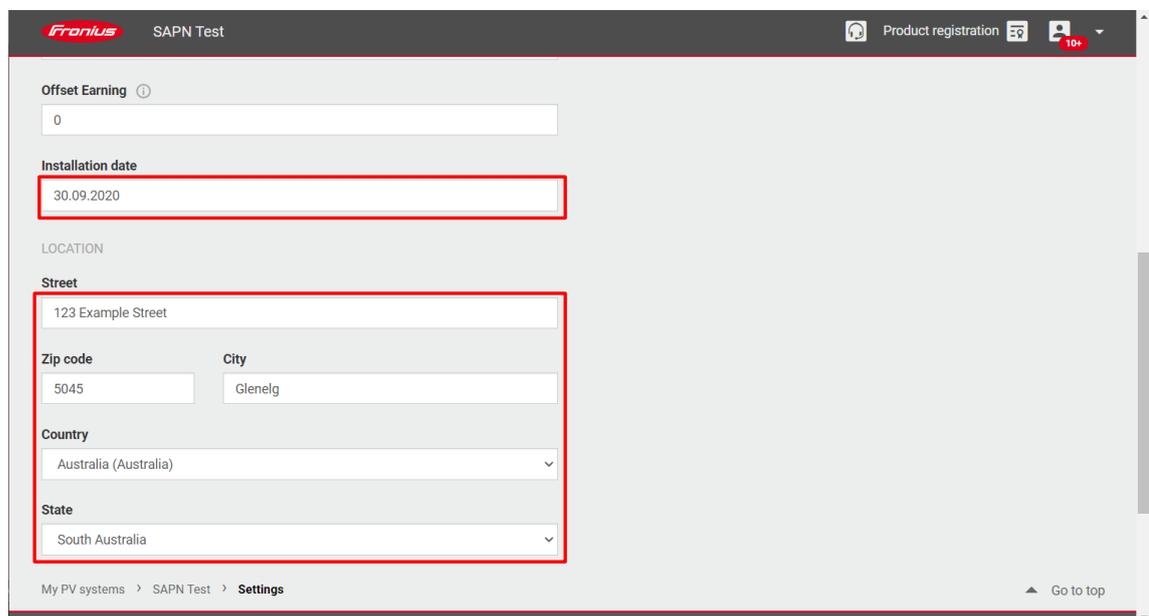
### 4.2 Ensure correct site Address & Installation Date is entered

In order for SAPN and Fronius to cross reference the systems under their control, the correct address of the system MUST be entered.

Go to **SETTINGS** → **PROFILE**



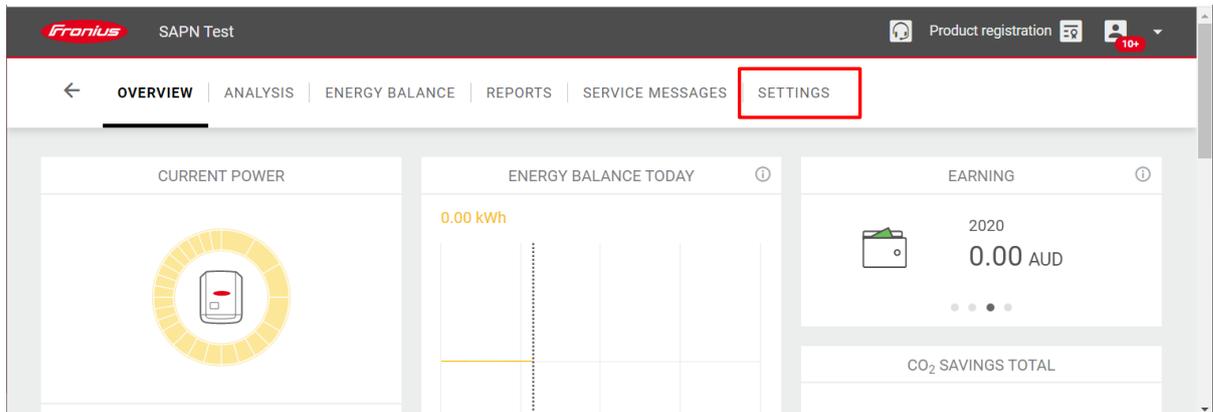
Enter the date of installation under **“Installation Date”**  
Then enter the PV system site address



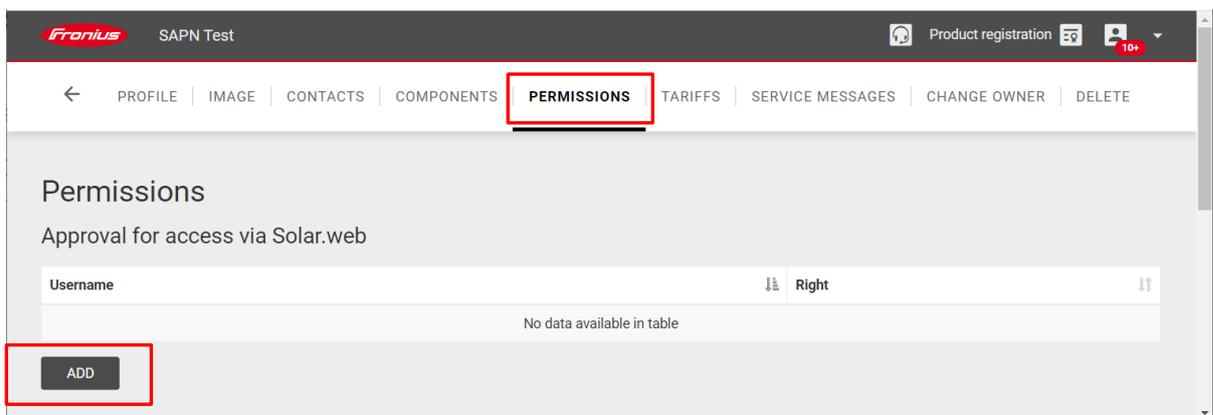
### 4.3 Add Guest permission for SAPN

In order for the system to be allocated to SAPN for use with the Fronius API inverter control for the remote shutdown, the User [agent@sapn.com.au](mailto:agent@sapn.com.au) must be added to the **PERMISSIONS** list as a **“Guest”**.

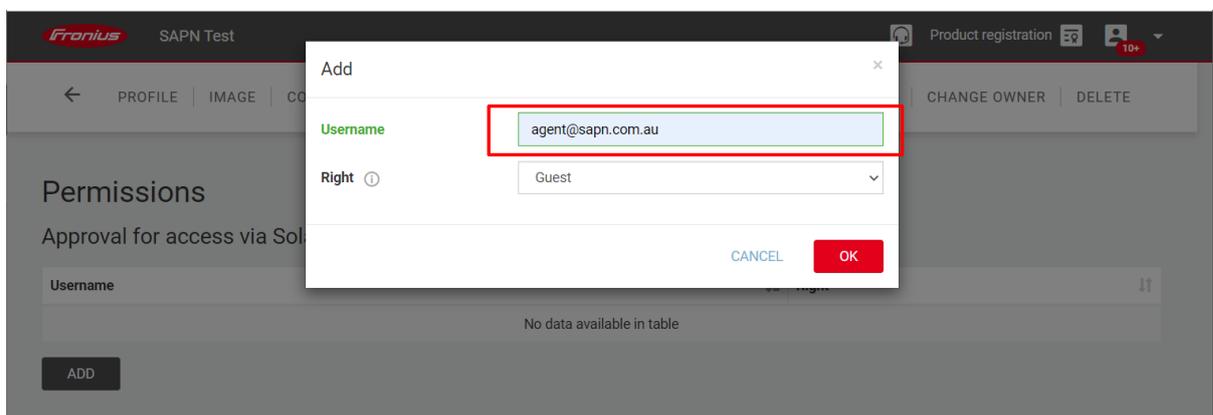
Go to the **SETTINGS**



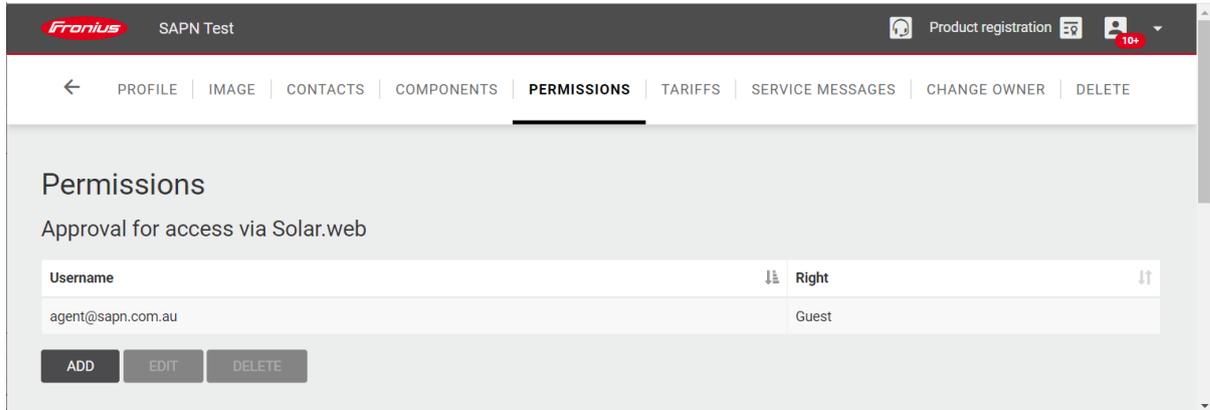
Then go to **PERMISSIONS** and click on **“ADD”**



Under **Username** enter **“agent@sapn.com.au”** and under **Rights** select **“Guest”** then click **OK**



SAPN has now been added as a **Guest** to the system

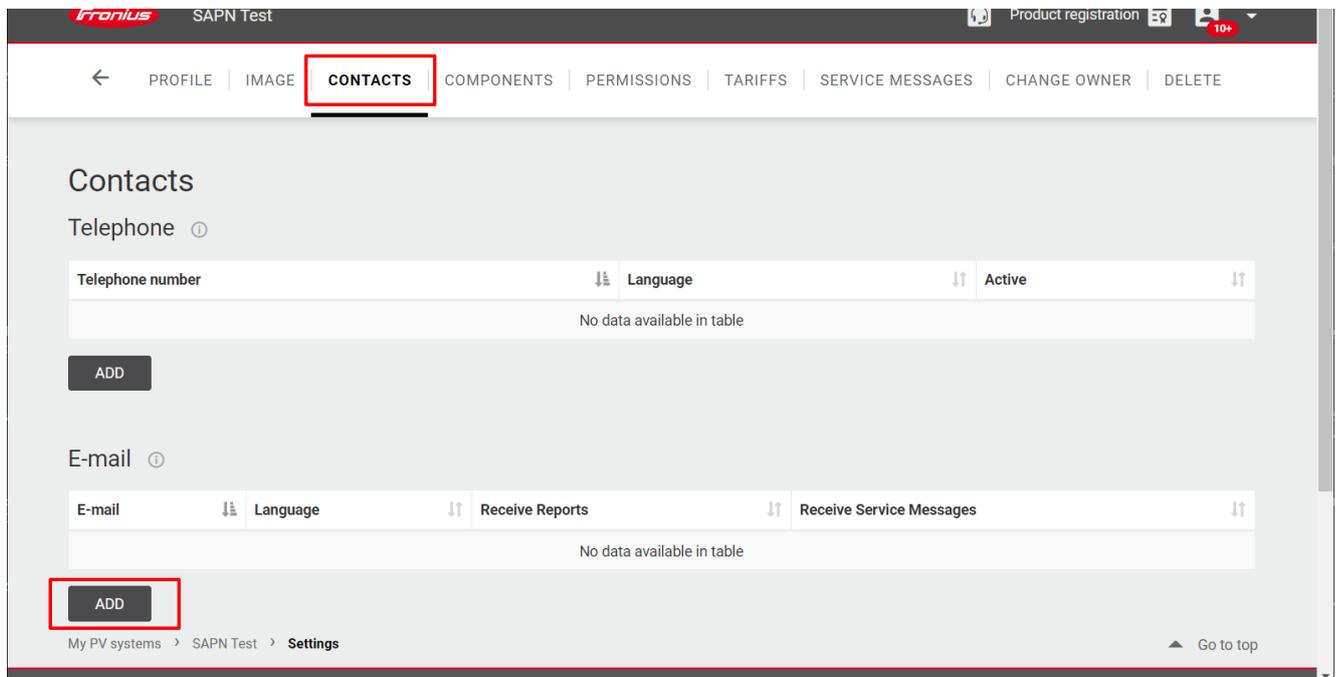


#### 4.4 Add Owner / Operator email contact to CONTACTS

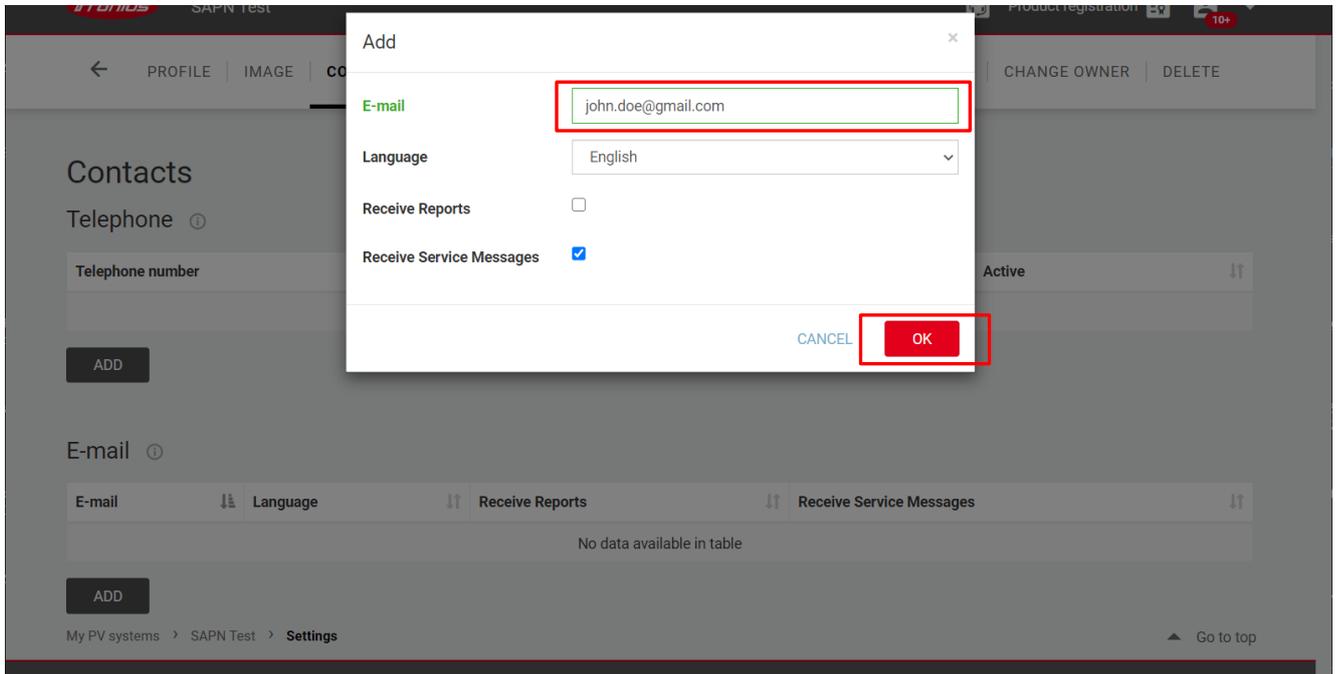
To fulfil the communication connection requirements dictated by SAPN, if the generating system goes “offline” or loses connection to Solarweb, the End Customer (Owner / Operator) must be notified that their system has lost communication to the Fronius server (Solarweb) and thus can no longer be remotely controlled / no longer compliant.

They will be sent an automated Email indicating that the system has lost communication and that they need to restore the connection.

Go to **SETTINGS** → **CONTACTS**  
Then under **E-mail** click **“Add”**



Enter the PV system Owner/Operators contact E-mail address, and click **“OK”**

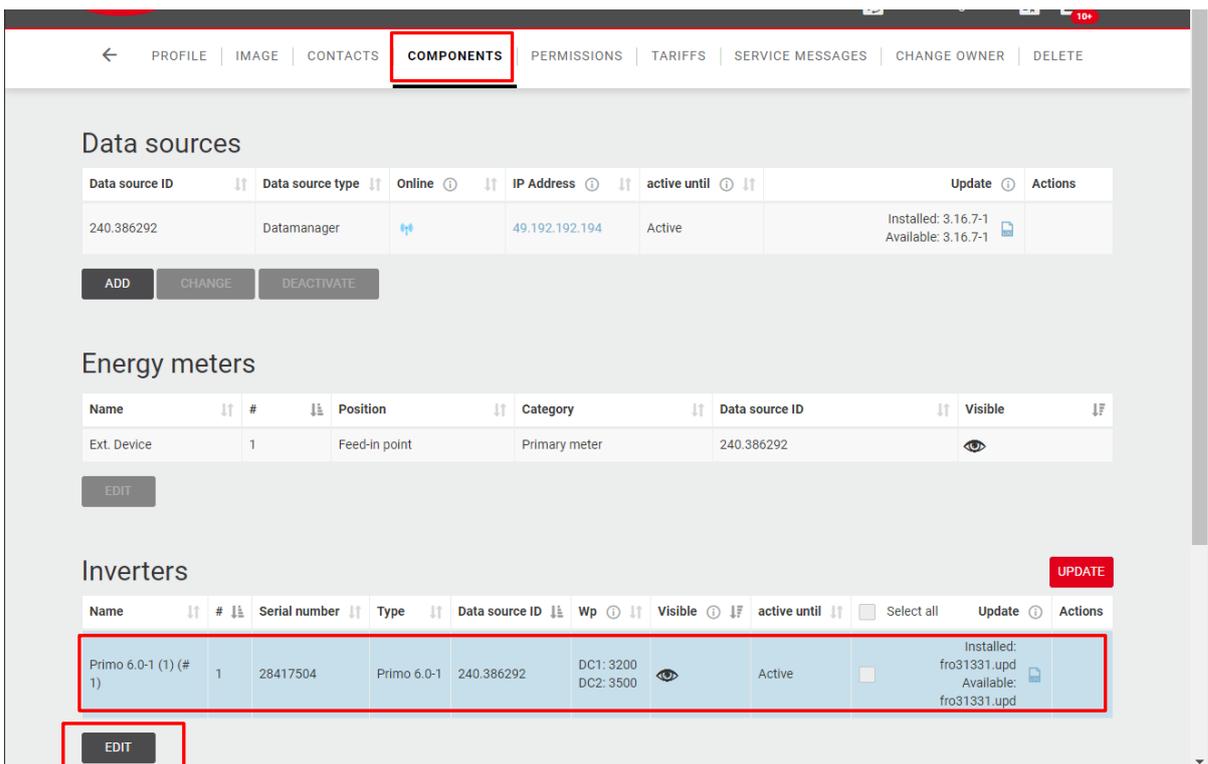


#### 4.5 Add site NMI number to the PV system

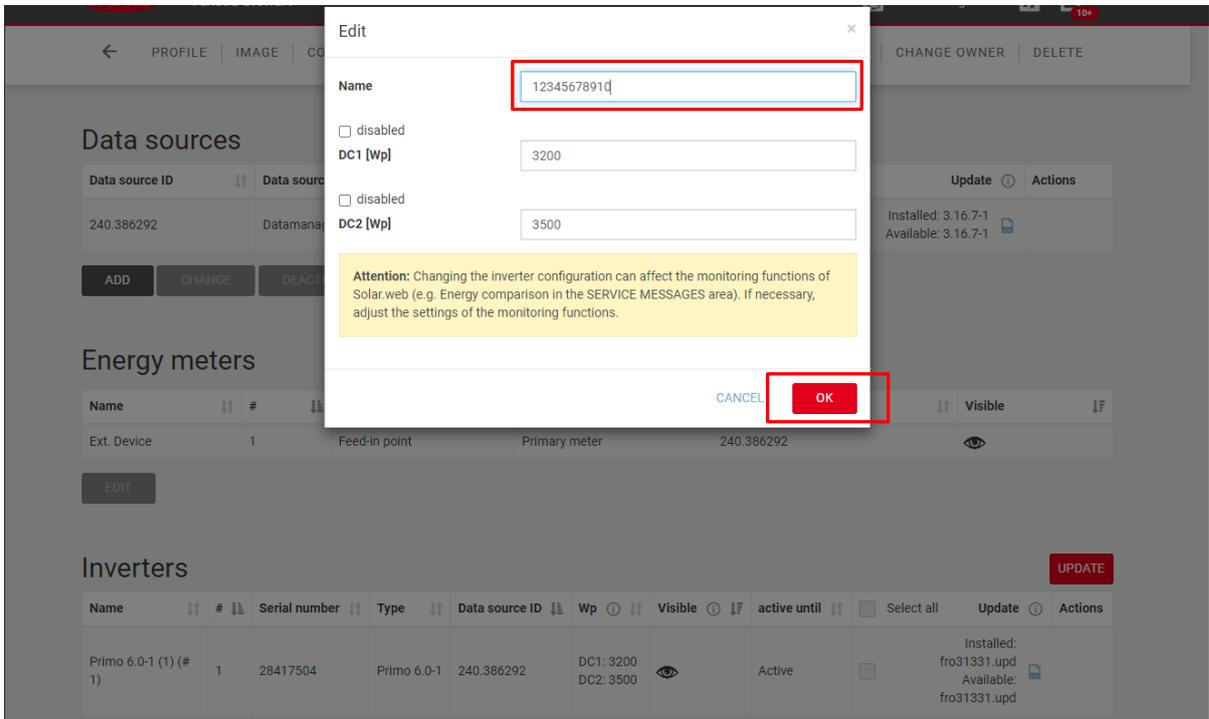
In order for SAPN and Fronius to align the correct systems the NMI number needs to be added to the system. As there is no dedicated box to enter this number, therefore the inverter “name” shall be used to enter the NMI number.

Go to **SETTINGS → COMPONENTS**

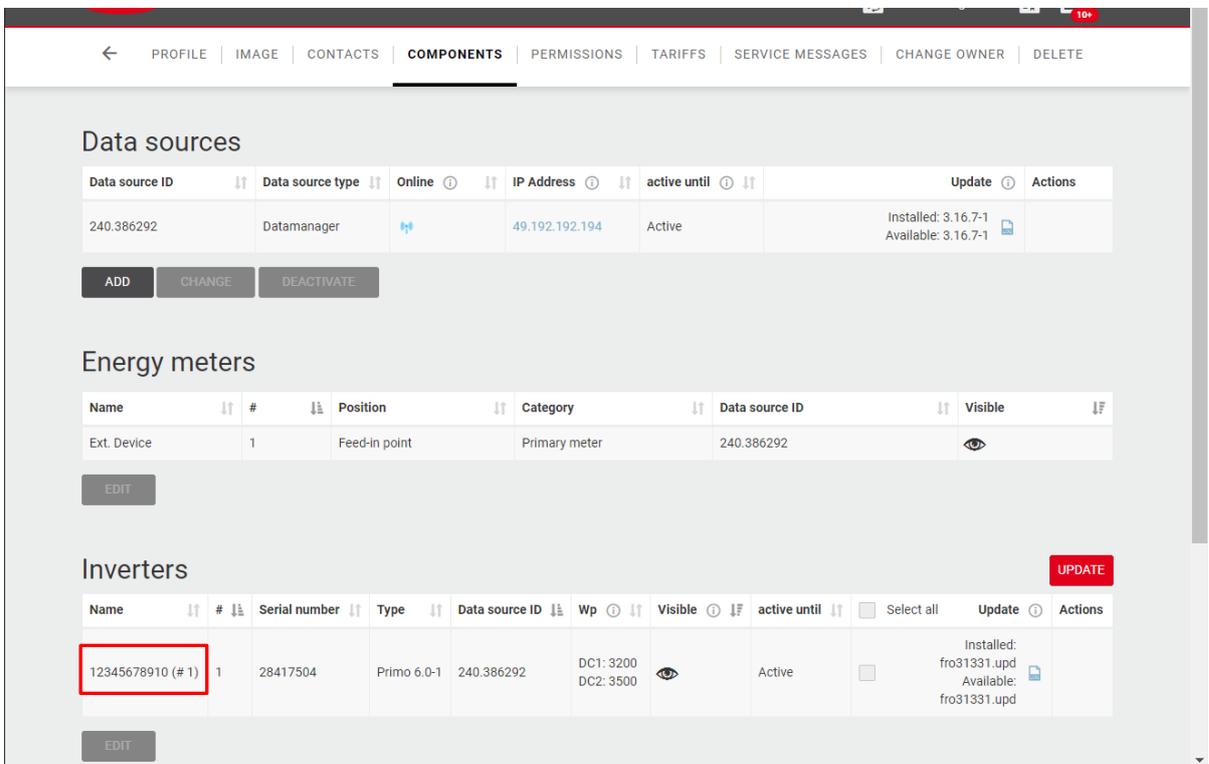
Click on the inverter information row and click **“Edit”**



Delete the inverter **“Name”** and enter the 10– 11 digit NMI number, and click **OK**



The NMI will now be displayed in the inverter **“Name”** box

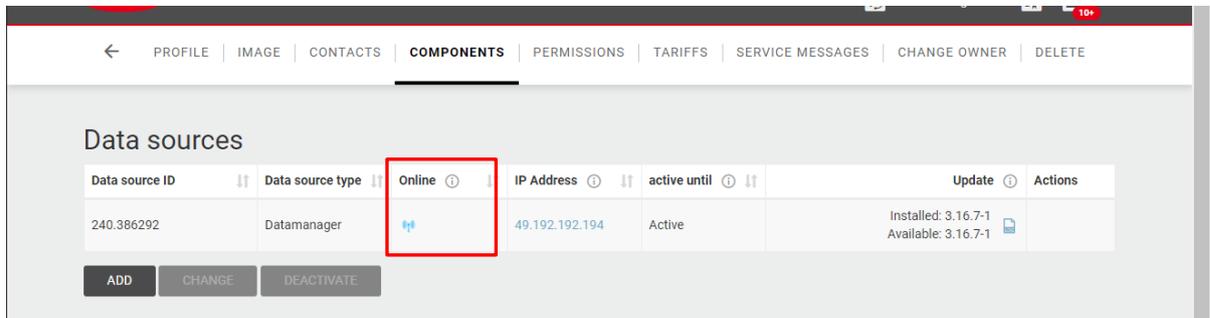


## 4.6 Ensure system is “Online” and communicating to Solarweb

For compliance, the system MUST show an “online” status in Solarweb

Go to **SETTINGS** → **COMPONENTS**

Check the online status is BLUE 



## 5. ECOC DOCUMENTATION

### 5.1 Inverter S/N entry

As a part of the compliance and to make sure SAPN and Fronius are able to synchronise the system lists, it is very important that the correct Inverter S/N is entered in the eCoC (Electronic Certificate of Compliance) form when submitted:



Inverter \*

Manufacturer

Inverter \*

Model

Serial Number 1 \*

Export Limited \*

END OF DOCUMENT

Fronius Australia Technical Support  
Email: [PV-Support-Australia@fronius.com](mailto:PV-Support-Australia@fronius.com)  
Phone: 03 8340 2910

For more detailed information see the operation manual available on the product specific page on <http://www.fronius.com/en-au/australia>