Appendix B – Manufacturer's CLS Product Information

This form is available in a Microsoft Word version from the ENA's website.

G100/2 - Form B - Compliance Verification Report for Customer Export or Import Limitation Schemes

This form shall be used by the **Manufacturer** to demonstrate and declare compliance with the requirements of EREC G100. The form can be used in a variety of ways as detailed below:

1. For **Fully Type Tested** status

    The **Manufacturer** can use this form to obtain **Fully Type Tested** status for a **CLS** by registering this completed form with the Energy Networks Association (ENA) Type Test Register.

2. To obtain **Type Tested** status for a product

    The **Manufacturer** can use this form to obtain **Type Tested** status for one or more **Components** which are used in a **CLS** by registering this form with the relevant parts completed with the Energy Networks Association (ENA) Type Test Register.

3. One-off Installation

    The **Installer** can use this form to confirm that the **CLS** has been tested to satisfy the requirements of this EREC G100. This form shall be submitted to the **DNO** before commissioning.

A combination of (2) and (3) can be used as required, together with Form C where compliance of the **CLS** is to be demonstrated on site.

Note:

If the **CLS** is **Fully Type Tested** and registered with the Energy Networks Association (ENA) Type Test Register, Form C shall include the **Manufacturer**'s reference number (the Type Test Register system reference), and this form does not need to be submitted.

Where the **CLS** is not registered with the ENA Type Test Register or is not **Fully Type Tested** this form (all or in parts as applicable) shall be completed and provided to the **DNO**, to confirm that the **CLS** has been tested to satisfy all or part of the requirements of this EREC G100.

CLS Designation			
Manufacturer's reference number	X3-Hybrid-5.0-D,X3-Hybrid-6.0-D,X3-Hybrid-8.0-D, X3-Hybrid-10.0-D,X3-Hybrid-12.0-D,X3-Hybrid-15.0-D, X3-Hybrid-5.0-M,X3-Hybrid-6.0-M,X3-Hybrid-8.0-M, X3-Hybrid-10.0-M,X3-Hybrid-12.0-M,X3-Hybrid-15.0-M,		
Manufacturer name	SolaX Power Network Technology (Zhe jiang) Co., Ltd.		
Address	No.288 Shizhu Road, Tonglu Economic Development Zone, Tonglu City, Zhejiang Province 310000, P. R. CHINA.		
Tel	+86(0571)-56260011	Web site	www.solaxpower.com
E:mail	info@soalxpower.com		
Installer's name			
Address			

Tel		Web site	
E:mail			

Export/Import capabilities

Export	Y / N	Import	Y / N

Description of Operation

EREC G100 section 4.2 requires a description of the **CLS**, and schematic diagram, to be provided to the **Customer**. Please provide that description and the diagram here.

The SolaX Power Network Technology (Zhe jiang) Co., Ltd. realize the function of CLS through set the limitit value on the inverter LCD display. The realization of the function is based on the control of the internal logic of the inverter, control the communication between the inverter and the meter, monitor the grid-connected information and adjust in real time.

Communications Media

Document the provisions made for the use of various communication media, and both the inherent characteristics and the design steps made to ensure security and reliability.

The communication mediums of the CLS is Wired. Through wired communication, correctly connected meters, pointing to the grid.

Cyber Security

Confirm that the **Manufacturer** or **Installer** of the **CLS** has provided a statement describing how the **CLS** has been designed to comply with cyber security requirements, as detailed in section 4.7.

SolaX Power Network Technology (Zhe jiang) Co., Ltd. declare that G100 certified products, and the variant models to be included in the certification, Confirm that the product has been designed to comply with cyber security requirements.

Are in compliance with Cyber security requirements in accordance with the standards:

- *ENA Engineering Recommendation G99 Issue 1 Amendment 8 2021*
- ETSI EN 303 645;
- PAS 1879 "Energy smart appliances – Demand side response operation – Code of practice";

Power Quality Requirements

Where the **CLS** includes the power electronics that controls generation or loads (as opposed to the power electronics being included in **Devices** that are subject to their own power quality compliance requirements) please submit the harmonic and disturbance information here as required by EREC G5 and EREC P28.

SolaX Power Network Technology (Zhe jiang) Co., Ltd. confirms that the product complies with the requirements of the relevant harmonics standards and that the relevant harmonic data has been provided as required by ER G5.

Fail Safe

CLS internal failure: please submit here the description of the internal **Fail Safe** design and operation. Please also document how it has been demonstrated, including the non-volatile recording of times and numbers of state 2 operations, and confirm the overall response of the **CLS** to this internal failure.
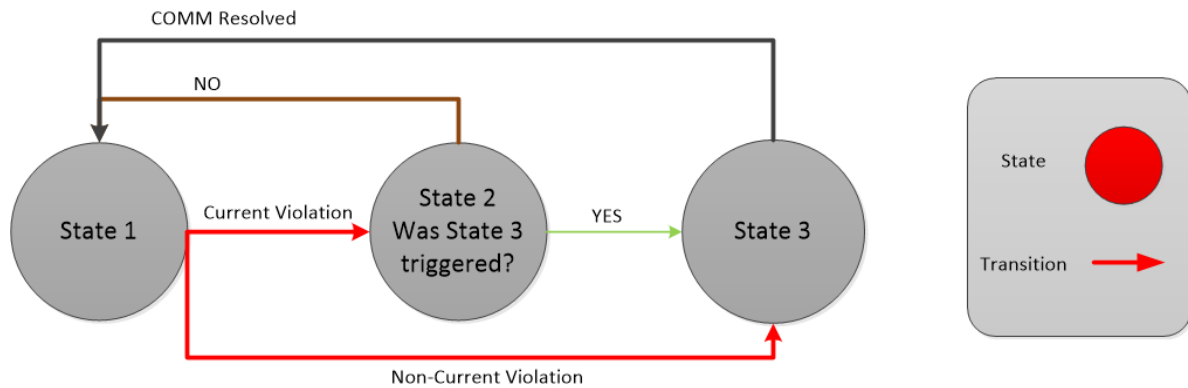
Communication and power supply failures between **Components** and **Devices**. Please document here compliance with EREC G100 section 5.5.

Component/Device number/description	Communication failure test	Power supply failure test
Unplug communications cable between Inverter and Meter	PASS	PASS
Under normal operating conditions, The Pgrid value is reduced to 0W Inverter response time	PASS	PASS
Under normal operating conditions, The Pgrid value is reduced to 5000W Inverter response time	PASS	PASS

Operational Tests

In accordance with EREC G100 section 5.6 undertake the tests A to D to confirm correct operation in state 1 and state 2, that transition into state 3 occurs as required, and that behaviour in state 3 is also as required.

Test A	
Nominal Export Limit (for type tests this will be at maximum, minimum and one intermediate setting) in Amp:	21A
Nominal Import Limit (for type tests this will be at maximum, minimum and one intermediate setting) in Amp:	21A

No	Starting level	Step value	**CLS** registers change in level?	**CLS** and/or **Component** and/or **Device** initiates correct response of ≥ 5%?	Duration of step in test	Correct state 1/ state 2 operation
1	20.5 IAC	22.5 IAC	Yes	Yes	58s	1 > 2 > 1
2	20.4 IAC	23.7 IAC	Yes	Yes	58s	1 > 2 > 1
3	20.5 IAC	25.9 IAC	Yes	Yes	58s	1 > 2 > 1
4	20.8 IAC	22.9 IAC	Yes	Yes	58s	1 > 2 > 1
5	20.9 IAC	24.2 IAC	Yes	Yes	58s	1 > 2 > 1
6	20.9 IAC	26.3 IAC	Yes	Yes	58s	1 > 2 > 1

Test B						
Nominal Export Limit:						21A
Nominal Import Limit						21A
No	Starting level	Step value	**CLS** registers change in level?	**CLS** and/or **Component** and/or **Device** initiates correct response of ≥ 5%?	Duration of step in test	Correct state 3 operation
7	21.6 IAC	21.7 IAC	Yes	Yes	62s	1>2>3
8	21.6 IAC	21.7 IAC	Yes	Yes	62s	1>2>3

State 3 Reset

These tests are to demonstrate compliance with section EREC G100 4.5.2.

Please document how the reset from state 3 to state 1 has been demonstrated. Please include how the reset is achieved.

Please confirm that for **CLSs** to be installed in **Domestic installations** three (3) resets causes lockout or that for non-domestic installations lockout can only be reset after four hours. Please explain how lockout is reset.

1.   System state is "State 3".
2.   After the communication is restored, the grid will be connected again
3.   CLS changes system state to "State 1 - Normal Operation"