

Issue Date: November 17, 2025

Revision Date: None

Dear James Wang

Shenzhen Lux Power Technology Co., Ltd.

Floors 1-5, Building A, Donghua Industrial Park, 5003 Bao'an Avenue, Bao'an District, Shenzhen, 518126, China.

Subject: Evidence of inverter support for IEEE 2030.5/Rule 21 CSIP Phase 2 and Phase 3 Function 1 and 8 Functionality

Dear James Wang,

This letter confirms that Intertek Testing Services Shenzhen Ltd. Guangzhou Branch. witnessed the Appendix C testing listed in Resolution E-5000 from the California Public Utilities Commission Draft dated July 11, 2019. The Resolution requires the verification of five tests cased for inverters that do not directly implement IEEE 2030.5 client functionality. During the test, the inverter is to be connected to a SunSpec Certified IEEE 2030.5/CSIP gateway. The five tests are listed below and specified in the SunSpec IEEE 2030.5/CSIP test procedures:

- Inverter Status (BASIC-028)
- Inverter Meter Reading (BASIC-029)
- Basic Inverter Control – Volt/Var (BASIC-006)
- Basic Inverter Control – Fixed Power Factor (BASIC-008)
- Basic Inverter Control – Volt-Watt (BASIC-011)

The tests were performed using ShenZhen Lux Power Technology Co., LTD DER Client listed in Table 1 connected to the below Inverter manufacturer models listed in Table 2 and 2a.

Inverter Manufacture:

Shenzhen Sea Star Industry Co., Ltd

No.10, JinLong 1st Road, Baolong Community, Longgang District, ShenZhen, China

Table 1: DER Client Information

Manufacturer	Product Name	Product Model#	Software Checksum
ShenZhen Lux Power Technology Co., LTD	Lux Power Management System	LUX1.1	0xC5BD19F9

Table 2: Inverter Models Information

Inverter Manufacturer	Inverter Model#	EUT Serial#	Date Tested / Comments
Shenzhen Lux Power Technology Co., Ltd.	GEN-HB-US 25K	NA	2025-11-06
	GEN-HB-US 24K	NA	Same Communication Protocol as GEN-HB-US 25K
	GEN-HB-US 20K	NA	Same Communication Protocol as GEN-HB-US 25K
	GEN-HB-US 16K	NA	Same Communication Protocol as GEN-HB-US 25K

Note:
 All above inverter models have same communication hardware and same software.


Checksum for control software:
 24kHybridDSP 250113.Hex checksum: 0x4A414132
 24kHybridM0 250113.Hex checksum: 0x4A424233

Checksum for communication software:
 24kHybridM3 250113.Hex checksum: 0x4A414131

The inverter under test was subjected to testing conditions as follows:

- The inverter was operating during test harness verification procedure
- The ShenZhen Lux Power Technology Co., LTD IEEE2030.5 DER Client listed in Table 1 was given stimuli in the form of IEEE 2030.5 commands (Inverter Status, Inverter Meter Reading, Volt/VAR, Fixed Power Factor, and Volt/Watt) sent from an IEEE 2030.5 server that were subsequently translated to signals understood by the inverter.
- The inverter parameters were verified: a) to change during the test cases for Volt-VAR, Fixed Power Factor, and Volt-Watt and b) report monitored data during the test cases for Inverter Status and Inverter Meter Reading. Based on this procedure, the requirements from Appendix C of the resolution were verified.
- The inverter was verified that it can perform Disable Permit Service and Limit Active Power functions with the DER Client listed in Table 1, under the commands sent out by IEEE 2030.5 server.

Very truly yours,

Tested By,
Zeyu Yang


Engineer
Intertek Testing Services Shenzhen Ltd.
Guangzhou Branch.

Approved By,
Jason Fu


Reviewer
Intertek Testing Services Shenzhen Ltd.
Guangzhou Branch.

REPORT REVISIONS

Date/ Proj.#	Project Handler/ Reviewer	Description of Change
NA	NA	NA