

Issue Date: 2025.4.14

Dear James Wang
ShenZhen Lux power Technology Co., LTD
C501, Building A, Donghua Industrial Park, 5003 Bao'an Avenue, Sanwei
Community, Hangcheng Street, 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, 2, 3 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)

Following tests were also performed:

The UL 1741 SA17 Disable Permit Service, which is required by California, Electric Rule 21, Generating Facility Interconnections, Phase 3, Function 2.

The UL 1741 SA18 Limit Active Power, which is required by CA Rule 21, Phase 3, Function 3.

The tests were performed using ShenZhen Lux Power Technology Co., LTD DER Client model number listed in Table 1 connected to the below Inverter Manufacturer Product models number listed in Table 2.

Inverter Manufacturer:
ShenZhen Lux power Technology Co., LTD
C501, Building A, Donghua Industrial Park, 5003 Bao'an Avenue, Sanwei
Community, Hangcheng Street, Bao'an District, Shenzhen, 518126, 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-LB-US 16K	V3PROTESTY	2025.04.09~2025.04.10
	GEN-LB-US 15K	N/A	Same Communication Protocol as GEN-LB-US 16K
	GEN-LB-US 13K	N/A	Same Communication Protocol as GEN-LB-US 16K
	LXP-LB-US 16K	N/A	Same Communication Protocol as GEN-LB-US 16K
	LXP-LB-US 13K	N/A	Same Communication Protocol as GEN-LB-US 16K

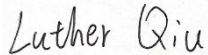
Note: All above inverter models have same communication hardware and software.

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

- The inverter was operating during test harness verification procedure
- ShenZhen Lux Power Technology Co., LTD 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.

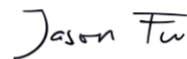
Very truly yours,

Tested By,



Luther Qiu
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
N/A	N/A	N/A

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