g GE Energy	**Functional Testing Specification**
Parts & Repair Services ***Louisville, KY***	**LOU-GED-IS200TRLYH1B**

Test Procedure for a

DOCUMENT REVISION STATUS: Determined by the last entry in the "REV" and "DATE" column

REV.	DESCRIPTION	SIGNATURE	REV. DATE
A	Initial release	Jimmy Morgan	10/4/18
B			
C			

PREPARED BY	REVIEWED BY	REVIEWED BY	QUALITY APPROVAL
J.Morgan			L. Groves
DATE	**DATE**	**DATE**	**DATE**
10-4-2018			10-4-2018

1. SCOPE

1.1 This is a functional testing procedure for a IS200TRLYH1B.

2. STANDARDS OF QUALITY

2.1 Refer to the current revision of the IPC-A-610 standard for workmanship standards.

3. APPLICABLE DOCUMENTS

3.1 The following document(s) shall form part of this specification to the extent specified herein. Unless otherwise indicated, the latest issue shall apply.
3.1.1 Check board's electronic folder for more information

4. ENGINEERING REQUIREMENTS

4.1 Equipment Cleaning
4.1.1 Equipment should be clean and free of debris prior to applying power unless performing an initial check. Refer to site specific SRA's for cleaning guidelines.
4.2 Equipment Inspection
4.2.1 Equipment should be visually inspected for any defects prior to applying power. This inspection should include the following as a minimum:
4.2.1.1 Wires - broken, cracked, or loosely connected
4.2.1.2 Terminal strips / connectors - broken or cracked
4.2.1.3 Components - visually damaged
4.2.1.4 Capacitors - bloated or leaking
4.2.1.5 Solder joints - damaged or cold
4.2.1.6 Circuit board - burned or de-laminated
4.2.1.7 Printed wire runs / Traces - burned or damaged

5. EQUIPMENT REQUIRED

5.1 The following equipment is required to perform the process requirements. Equipment may be substituted provided that all accuracy's and test ratios are equivalent or better.

Qty	Reference #	Description
1		Fluke 87 DMM (or Equivalent)
1		Tenma or equivalent power supply +28v
1	H188886	SIM035 MK6TMR

6. Modifications/Upgrades

6.1 If any upgrades are performed, reprogram the ID chips to reflect the new Model/Serial number

7. Testing Procedure

7.1 Static checks

7.1.1 Check resistance of all Mov's

7.1.2 Check the following points in the fuse circuits for continuity.

7.1.2.1 JF1-1 to TB1-1

7.1.2.2 JF1-1 to TB1-5

7.1.2.3 JF1-1 to TB1-9

7.1.2.4 JF1-1 to TB1-13

7.1.2.5 JF1-1 to TB1-17

7.1.2.6 JF1-1 to TB1-21

7.1.2.7 JF1-3 to TB1-4

7.1.2.8 JF1-3 to TB1-8

7.1.2.9 JF1-3 to TB1-12

7.1.2.10 JF1-3 to TB1-16

7.1.2.11 JF1-3 to TB1-20

7.1.2.12 JF1-3 to TB1-24

7.2 Simplex mode relay test

7.2.1 Connect +28VDC to JT1-1

7.2.2 Connect GND to JT1-2

7.2.2.1 The relays can be energized by grounding each following pin and verified by measuring resistance between the points in the table below.

Pin	Relay	Point 1	Point 2
JA1-3	RELAY1	TB1-2	TB1-3
JA1-4	RELAY2	TB1-6	TB1-7
JA1-5	RELAY3	TB1-10	TB1-11
JA1-6	RELAY4	TB1-14	TB1-15
JA1-7	RELAY5	TB1-18	TB1-19
JA1-8	RELAY6	TB1-22	TB1-23
JA1-9	RELAY7	TB2-26	TB2-27
JA1-10	RELAY8	TB2-30	TB2-31
JA1-11	RELAY9	TB2-34	TB2-35
JA1-12	RELAY10	TB2-38	TB2-39
JA1-13	RELAY11	TB2-42	TB2-43
JA1-14	RELAY12	TB2-46	TB2-47

7.3 TMR mode relay test

7.3.1 The following relays can be energized by grounding 2 of the 3 listed pins and verified by measuring the following points.

Pin	Relay	Point 1	Point 2
JT1-3, JS1-3, JR1-3	RELAY1	TB1-2	TB1-3
JT1-4, JS1-4, JR1-4	RELAY2	TB1-6	TB1-7
JT1-5, JS1-5, JR1-5	RELAY3	TB1-10	TB1-11
JT1-6, JS1-6, JR1-6	RELAY4	TB1-14	TB1-15
JT1-7, JS1-7, JR1-7	RELAY5	TB1-18	TB1-19
JT1-8, JS1-8, JR1-8	RELAY6	TB1-22	TB1-23
JT1-9, JS1-9, JR1-9	RELAY7	TB2-26	TB2-27
JT1-10, JS1-10, JR1-10	RELAY8	TB2-30	TB2-31
JT1-11, JS1-11, JR1-11	RELAY9	TB2-34	TB2-35
JT1-12, JS1-1, JR1-12	RELAY10	TB2-38	TB2-39
JT1-13, JS1-1, JR1-13	RELAY11	TB2-42	TB2-43
JT1-14, JS1-14, JR1-14	RELAY12	TB2-46	TB2-47

7.3.1.1

7.4 TMR Panel and Fuse Detection circuit testing.

7.4.1 Power down the MK6TMR and install your test card. Then power the Rack back on.

7.4.2 Establish connection to the rack through the pc.

7.4.3 Locate the VGEN card inside of the sim. (The fuse detection test can be performed here).

7.4.3.1 Using caution, carefully remove FU1 on the TRLY card.

7.4.3.2 On the Sim, right click the VGEN card display faults. The screen should show a fault with the fuse you removed.

7.4.3.3 Reinstall the fuse and repeat the process for the remaining fuses.

7.5 Post Testing Burn-in Required __X_ Yes ___ No

Note: All MARK I, II, & III Turbine related cards require a post testing burn-in of 100 hours.

7.6 ***TEST COMPLETE ***

8. Notes

8.1 None at this time?

9. Attachments

9.1 None at this time?