g GE Energy	**Functional Testing Specification**
Parts & Repair Services ***Louisville, KY***	**LOU-GED-IS200EPDM**

Test Procedure for an IS200EPDM Exciter Power Distribution Module.

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1. SCOPE

1.1 This is a functional testing procedure for an IS200EPDM Exciter Power Distribution Module (EPDM).

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)
2		Tenma Dual Output Power Supply

6. TESTING PROCESS

*******Note: If any part of any step in this test procedure fails, repair the unit and continue testing.*******

6.1 Setup

6.1.1 Turn switches sw1 through sw7 “OFF”.

6.1.2 Place jumper **BJS** in position 1 to 2.

6.2 Static Checks

6.2.1 Using Multimeter, set for Resistance function, check the points listed below for the expected results:

From:	To:	Expected Results:
TB1-1	TB1-3	Continuity
TB1-1	TB1-5	Continuity
TB1-2	TB1-4	Continuity
TB1-2	TB1-6	Continuity
TB1-13	TB1-15	Continuity
TB1-17	TB1-19	Continuity
TB1-21	TB1-23	Continuity
TB1-22	TB1-24	Continuity
TB1-13	JDCA1-1	Continuity
TB1-17	JDCA1-3	Continuity
TB1-13	TB1-17	> 1 Meg Ohm
TB1-21	TB1-22	> 1 Meg Ohm
TB1-21	JDCA2-1	Continuity
TB1-22	JDCA2-3	Continuity
TB1-1	TB1-2	> 1 Meg Ohm
TB1-2	JDCA1-7	Continuity
TB1-2	JDCA1-10	Continuity
TB1-2	JDCA2-7	Continuity
TB1-2	JDCA2-10	Continuity
TB1-1	DCHI (EYELET)	Continuity
P125 (EYELET)	JDCA1-9	Continuity
P125 (EYELET)	JDCA1-12	Continuity
P125 (EYELET)	JDCA2-9	Continuity
P125 (EYELET)	JDCA2-12	Continuity
E3 (EYELET)	E4 (EYELET)	Continuity
E3 (EYELET) SFTYGND	SW1 GND	Continuity
E3 (EYELET) SFTYGND	SW2 GND	Continuity

From:	To:	Expected Results:
E3 (EYELET) SFTYGND	SW3 GND	Continuity
E3 (EYELET) SFTYGND	SW4 GND	Continuity
E3 (EYELET) SFTYGND	SW5 GND	Continuity
E3 (EYELET) SFTYGND	SW6 GND	Continuity
E3 (EYELET) SFTYGND	SW7 GND	Continuity
BJS-2	CHASGND1 (EYELET)	Continuity
CHASGND (EYELET)	MV4 (SIDE BY TB1)	Continuity

6.3 Testing Procedure

6.3.1 Functional Testing

6.3.1.1 Jumper DCHI (eyelet) to P125 (eyelet).

6.3.1.2 Connect +125 VDC to TB1-1. Connect 125 VDC Return to TB1-2.

6.3.1.3 Apply +125 VDC power to unit under test (**UUT**). LED's DS9, DS10, and DS11 should illuminate.

6.3.1.4 Turn on switches SW1 through SW7, corresponding LED's DS1 through DS7 should illuminate.

6.3.1.5 Using Multimeter, set for DC Volts function, positive lead to pin 1 of each jack called out in this step and negative lead to pin 2 of same jack, verify +125 VDC is present at **J10_AUX**, **J11_AUX**, **J_SPARE**, **J1C**, **J1M2**, **J1M1**, **J8C**, **J8B**, and **J8A**.

6.3.1.6 Using Multimeter, set for DC Volts function, positive lead to pin 1 of **J9** and negative lead to pin 2 of same jack, verify +125 VDC is present.

6.3.1.7 Remove all power, then connections, to unit.

6.4 ***TEST COMPLETE ***

7. NOTES

7.1 None at this time.

8. ATTACHMENTS

8.1 None at this time.