g GE Energy	**Functional Testing Specification**
Parts & Repair Services ***Louisville, KY***	**LOU-GED- DS3800HPTG**

Test Procedure for a DS3800HPTG

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

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DATE	**DATE**	**DATE**	**DATE**
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1. SCOPE

1.1 This is a functional testing procedure for a IC3600SPRA1Card.

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 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 the local documented procedures 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 85 DMM (or Equivalent)
1		Oscilloscope
1		SCR Firing Box

6. TESTING PROCESS

6.1 Setup

6.1.1 Connect as described on connection diagram sheet.

Note: This card has 4 separate circuits, 2 each of the same circuit and must be tested as per Sh. 3.0

6.2 Testing Procedure

6.2.1 High Voltage Indicator Test: Connect 120VAC between JG-1 and JG-2 and see NE-2 glow dimly. Remove voltage.

6.2.2 Attenuator Test: Connect an ohmmeter from JA-8 to JF-2 and read 996K +/- 0.1%.

6.2.3 Isolation Resistance: Connect an ohmmeter on high range between JA-2(DCOM) and the following points and look for infinity reading: JF-2, JC-1, JC-2, and JA-8.

6.2.4 Gate Driver Test: Connect +28VDC to JA-1: Common to JA-2. Connect non-isolated negative pulses from the Firing Box to JA-9. Connect a 10 ohm 2 watt load resistor across JC-1 and JC-2. Observe the output pulses with the Oscilloscope across the load. Probe to JC-1 and scope COM to JC-2. See approx. 20V output pulses. Verify LED CR7 is lit when pulses are present.

6.2.5 Leave +28VDC hooked up. Move the load resistor to JE-3 and JE-4. Once again observe the output pulses with the Oscilloscope. Move the Firing Box non-isolated negative lead to JA-6. Turn Firing Box and observe output. Verify LED CR8 is lit.

6.2.6 ******TEST COMPLETE***

6.3 ***TEST COMPLETE ***

7. NOTES

7.1 None at this time

8. ATTACHMENTS

8.1 None at this time