g GE Energy	**Functional Testing Specification**
Parts & Repair Services ***Louisville, KY***	**LOU-GED-DS3800NGDC**

Test Procedure for an DS3800NGDC card

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

REV.	DESCRIPTION	SIGNATURE	REV. DATE
A	Initial release	G. Chandler	2/18/2010
B	Clarified some steps and changed tolerances for more accuracy.	P. Kelley	11/29/2010

PREPARED BY	REVIEWED BY	REVIEWED BY	QUALITY APPROVAL
G. Chandler	Paul Kelley		Charlie Wade
DATE	**DATE**	**DATE**	**DATE**
2/18/2010	11/29/2010		2/18/2010

1. SCOPE

1.1 This is a functional testing procedure for a DS3800NGDC Card.

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		115VAC Source (isolated)
1		Oscilloscope
1		10VAC Source (isolated)

6. TESTING PROCESS

6.1 Testing Procedure

6.1.1 Apply 10VAC-RMS (isolated) between pins 4 & 5 of the JA connector.

6.1.2 Verify +5VDC +/-5% at the test point TP5, with respect to ground (DCOM).

6.1.3 Apply 115VAC (isolated) between pins 1 & 3 of the JA connector (keep 10VAC source applied).

6.1.4 Connect an O-Scope from pins 4 of JC connector with the respect to ground (DCOM). Set scope for 5V per/div at 5mS per div and DC coupled.

6.1.5 You shall observe a sawtooth (rounded) waveform at 14.2V peak-to-peak +/- 1.5V. This waveform shall switch from positive to negative every 12 seconds +/- 3 seconds.

6.1.6 Component test resistors R4, R20-R24, & C7 (lifting one side of R20 will allow testing of resistors in circuit).

6.2 ***TEST COMPLETE ***

7. NOTES

7.1 None at this time.

8. ATTACHMENTS

8.1 None at this time.