g GE Energy	**Functional Testing Specification**
Parts & Repair Services ***Louisville, KY***	**LOU-GED-IS200ECTBG1**

Test Procedure for an IS200ECTBG1xxx Card

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

REV.	DESCRIPTION	SIGNATURE	REV. DATE
A	Initial release	J. Francis	1/4/2010
B	Updated test for use in EX2100 cabinet	D. Waddy	6/30/14
C			

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DATE	**DATE**	**DATE**	**DATE**
1/4/2010	6/30/2014		1/7/2010

1. SCOPE

1.1 This is a functional testing procedure for an IS200ECTBG1xxx.

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	H190128	EX2100 cabinet
2		
3		

6. TESTING PROCESS

6.1 Setup

6.1.1 ***Inspect customer card for any physical defects or issues before installing the customer card in the EX2100 cabinet. Once the card has been inspected REMOVE POWER FROM THE CABINET. Locate the ECTB card on the back wall. Remove the test card and install the customer's card.***

6.2 TESTING PROCEDURE

6.2.1 Apply power to the cabinet and go online with ***TOOLBOX/EX2100/E1.dl.ecb***.

6.2.2 Clear all trips and alarms.

6.2.3 Turn switch ***94 EX-1*** and ***94 EX-2*** which should illuminate corresponding LED's above.

6.2.4 Verify that ***GP relays 1 through 4*** are toggling between N/O and N/C**.** ***(these relays can also be verified by relays K1GP through K4GP, which have internal LED's that should also toggle)***

6.2.5 Flip the 3-position toggle switches from ***START*** to ***STOP*** and ***RAISE*** to ***LOWER*** and verify with corresponding LED's. Toggle ***GP Input 5***, ***GP Input 6***, & ***52G Closed*** and verify with corresponding LED's. ***(these can also be verified by on board LED's on the ECTB)***

6.2.6 Toggle ***86 Trip*** which should give a corresponding trip in toolbox, verify that the trip is present and that it clears.

6.2.7 Allow card to Burn-in for a minimum of 12 Hrs.

6.2.8 ******TEST COMPLETE***

7. NOTES

7.1 For troubleshooting purposes you may want to address archived procedure **LOU-GED-IS200ECTBG1-A,** for bench specific testing**.**

8. ATTACHMENTS

8.1 None at this time.