GE Energy	**Functional Testing Specification**
Parts & Repair Services ***Louisville, KY***	**LOU-TOFFEE-IS200JPDS**

Test Procedure for IS200JPDSxxx Mark VIe Power Distribution 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	02/20/2014
B			
C			

PREPARED BY	REVIEWED BY	REVIEWED BY	QUALITY APPROVAL
J.Francis			Charlie Wade
DATE	**DATE**	**DATE**	**DATE**
02/20/2014			6/10/2014

Functional test procedure for IS200JPDSxxxx Mark VIe Power Distribution card.

1. SCOPE

1.1 This is a functional testing procedure for the IS200JPDSxxxx Mark VIe Power Distribution 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 or cracked
4.2.1.2 Terminal strips / connectors broken or cracked
4.2.1.3 Loose wires
4.2.1.4 Components visually damaged
4.2.1.5 Capacitors leaking
4.2.1.6 Solder joints damaged or cold
4.2.1.7 Circuit board burned or de-laminated
4.2.1.8 Printed wire runs 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	H190121	Mark VIe TMR Test Rack

6. TESTING PROCESS

Note: The following portions of the test assume you are familiar with using ToolboxST. You will need to perform downloads at least twice for UUT to be setup fully. You must also wait for approximately 3 minutes in between downloads for rack and UUT to reboot.

6.1 Functional Testing

6.1.1 Turn “OFF” Rack Power located at front right side of test rack.

6.1.2 Remove test card (GOLD card) from test rack and install Unit Under Test (UUT) into test rack.

6.1.3 Turn “ON” Rack Power switch. Wait for test rack to fully boot, approximately 3 minutes.

6.1.4 Open ToolboxST and open “LVLTMR01” by double-clicking on it and click the “ONLINE” button in the toolbar.

6.1.5 Click on the “HARDWARE” tab, this will show you all of the modules setup in the rack under the “Distributed IO” icon. The PPDA module should have a red circle with an X through it, indicating no communications.

6.1.6 Double click on the “X” on the PPDA Module. This will bring up a configuration box to enter the serial number of the UUT and hardware form. Click “OK” button when done.

6.1.7 From the menu, Download Controller Setup by going to Device->Download->Download Wizard. Follow instructions in dialog boxes that follow.

6.1.8 After all downloads completed successfully, bring unit online in ToolboxST and check that the red circle with an X through it is gone and ToolboxST will communicate with PPDA Module.

6.1.9 At this time all of the LED’s on the PPDA/JPDS Test Panel should be illuminated showing “GE”.

6.1.10 From menu bar, select “VIEW” then “LIVE VIEWS” then choose “PPDM” by double-clicking in the dialog box. PPDM Live View window should open. R, S, and T Voltage indicators should be showing good. Dry Contact Inputs for R, S, and T should be GREEN. AUX Fuse Status for R, S, and T should also be GREEN.

6.1.11 Press and hold “DRY CONTACT TEST” button until R, S, and T Dry Contact indicators turn RED.

6.1.12 Release “DRY CONTACT TEST” button. R, S, and T Dry Contact indicators should turn back to GREEN.

6.1.13 Turn off Switch SW4 on JPDD card. Voltage indicator for “R” should go to zero and “R” AUX Fuse Status indicator should turn RED.

6.1.14 Turn on SW4 on JPDD card. Voltage indicator for “R” should return to good status and “R” AUX Fuse indicator should turn GREEN.

6.1.15 Turn off Switch SW5 on JPDD card. Voltage indicator for “S” should go to zero and “S” AUX Fuse Status indicator should turn RED.

6.1.16 Turn on SW5 on JPDD card. Voltage indicator for “S” should return to good status and “S” AUX Fuse indicator should turn GREEN.

6.1.17 Turn off Switch SW6 on JPDD card. Voltage indicator for “T” should go to zero and “T” AUX Fuse Status indicator should turn RED.

6.1.18 Turn on SW6 on JPDD card. Voltage indicator for “T” should return to good status and “T” AUX Fuse indicator should turn GREEN.

6.2 Burn-In Process

6.2.1 Let unit run for at least 48 hours.

6.2.2 Cycle power to UUT.

6.2.3 Repeat steps 6.1.10 through 6.1.18.

6.2.4 If successful testing is complete.

6.3 ***TEST COMPLETE ***

7. NOTES

7.1 None at this time.

8. ATTACHEMENTS

7.1 None at this time.