g GE Energy	**Functional Testing Specification**
Parts & Repair Services ***Louisville, KY***	**LOU-GED-IS215UCCA/C**

Test Procedure for an IS220UCCA/C Mark VIe System Controller

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

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A	Initial release	J. Francis	12/11/2013
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J. Francis			Charlie Wade
DATE	**DATE**	**DATE**	**DATE**
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1. SCOPE

1.1 This is a functional testing procedure for an **IS220UCCA/C** MARK VIe System Controller.

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	H188922	Mark 6e Simplex Test Rack with computer

6. TESTING PROCESS

6.1 Testing Procedure

Note: The following tests assume you are familiar with using ToolboxST.

6.1.1.1 On Unit Under Test (UUT) ensure that Jumper E206, located near backup battery, is installed.

6.1.1.2 Remove 128MB Compact Flash Card from UUT.

6.1.1.3 Open ToolboxST and open "ds1" by double-clicking on it.

6.1.1.4 Insert Compact Flash card into San Disk Compact Flash Reader.

6.1.1.5 From the menu, Download Controller Setup by going to **Device>Download>Controller Setup.** Follow instructions in dialog boxes that follow, selecting Format Flash.

6.1.1.6 Remove Compact Flash from reader and install into UUT to be tested.

6.1.1.7 Install UUT into Mark Vle Simplex Test Rack.

6.1.1.8 Plug Mark VIe Simplex Test Rack cables for UUT into appropriate connectors on UCCA/C to be tested.

6.1.1.9 Apply power and wait for rack and UUT to boot. Should take approximately 3 minutes max.

6.1.1.10 Ping UUT using "Command Prompt" from Windows Start menu. The command is "ping 192.168.101.102".

6.1.1.11 If ping test is successful perform all downloads using ToolboxST download wizard.

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.

6.1.2 From the menu, use Download Wizard to finish loading files as needed (probably three) by going to **Device>Download>Download Wizard.** Follow instructions in dialog boxes that follow.

6.1.3 After all downloads completed successfully, bring unit online in ToolboxST and check for appropriate live values on any of the cards.

6.1.4 Let unit run online for at least 48 hours.

6.1.5 After testing has been completed successfully, remove Jumper E206. This disconnects the Back-Up battery for shipping and storage.

6.2 ***TEST COMPLETE ***

7. NOTES

7.1 None at this time.

8. ATTACHMENTS

8.1 None at this time.