g	GE Energy	Functional Testing Specification
	Parts & Repair Services Louisville. KY	LOU-GENEVA-IS200EPSMG1AC

Test Procedure for IS200EPSMG1AC cards tested on the GENEVA Test System and in a EX2100 Exciter

REV.	DESCRIPTION	SIGNATURE	REV. DATE
Α	Initial release	R. Duvall	05/21/03
В	Transferred procedure from a general group to a specific single document. Also added asset numbers to section 5.	J. Hardin	03/19/2012
С	Added section 6.3 for functional testing card with a EX2100 exciter	D. Waddy	6/30/2014
D	Revision C was supposed to specify only G2 cards can be functionally tested on the EX2100 exciter, not G1s. This revision shall clarify this, Only G2 models can be functionally tested on the EX2100 exciter.	C. Wade	7/28/2014

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PREPARED BY	REVIEWED BY	REVIEWED BY	QUALITY APPROVAL
Robert Duvall	J. Hardin	D. Waddy	Rober Dunll
DATE 05/21/03	3/19/2012	DATE 6/30/2014	DATE 05/21/03

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Functional test procedure for IS200EPSM cards tested on the GENRAD® GENEVA system and in a EX2100 exciter

1. SCOPE

1.1 This is a functional testing procedure for IS200EPSMG1AC or higher revision boards.

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 the 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	H188912	GENRAD Geneva Test System
1	H188733	EPSM Functional Test Fixture (EPSM#G58)
1	H190128	EX2100 Exciter

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6. Testing Process

6.1 Setup

NOTE: There are (2) IS200EPSM test fixture. Make sure you check revision. IS200EPSMG2A needs to have an IS200EPSDG1A daughter board attached in order to test it.

- **6.1.1** Install fixture H188733 onto Geneva test System.
- **6.1.2** Install UUT into test fixture.
- **6.2** Testing Procedure
 - **6.2.1** Load appropriate test program and follow instructions on screen.
- 6.3 EX2100 Exciter Testing (Only G2 models).
 - **6.3.1** Power off the cabinet.
 - **6.3.2** Remove test card and install customer card into desired rack.
 - **6.3.3** Apply power to the cabinet and go online on Toolbox.
 - 6.3.4 Verify that all trips and alarms clear and that the status is a green CONTROL/EQUAL at the bottom right corner. (If the status is not "CONTROL/EQUAL" it may be necessary to perform ACL downloads. To do so go to the DEVICE dropdown, select Download to ACL, select runtime and follow prompts, follow the same steps and select application code, cycle power, once the cabinet has rebooted perform a check/ build/ download.)
 - 6.3.5 Allow card to burn-in for 12 Hrs.
- 6.4 ***TEST COMPLETE ***

7. Notes

- 7.1 Changes to the electronic test file are located in the following directory on the local hard drive; C:\Genevalnfo\Geneva\Geneva Test Fixture Notes.
 - **7.1.1** These changes have been backed up on CD.

8. Attachments

8.1 Picture of the Geneva Test System

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