g GE Energy	**Functional Testing Specification**
Parts & Repair Services ***Louisville, KY***	**LOU-GED-IS220PEFV**

Test Procedure for an IS220PEFVHxxx Mark VIe Assembly.

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

REV.	DESCRIPTION	SIGNATURE	REV. DATE
A	Initial release	J. Francis	07/01/2013
B	Added Functional Testing and Burn-In.	J.Francis	12/15/2017

PREPARED BY	REVIEWED BY	REVIEWED BY	QUALITY APPROVAL
J. Francis			Charlie Wade
DATE	**DATE**	**DATE**	**DATE**
07/01/2013			7/3/2013

1. SCOPE

1.1 This is a functional testing procedure for an **IS220PEFVHxxxx** MARK VIe assembly.

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	H188818	TOFFE Test System #14
1	*	CHIP ID Computer
1	H190012	Toffee test fixture for IS210BPPB/HSLA
1	H190121	Mark Vie TMR Test Rack

6. TESTING PROCESS

6.1 Testing Procedure

Note: This procedure will test each card separately using its assigned test. The test procedure will be listed for each card. This unit is specifically designed ONLY to be used with the Woodward DVP (Digital Valve Positioner).

6.1.1 Remove the **IS2x0BPPBHxxxx** card and test using test procedure **LOU-TOFFEE-IS210BPPB-A**, referring to Models Database for latest revision of test procedure.

6.1.2 Remove the **IS200BVBGH1Axx** card and read the CHIP ID. The IS200BVBGH1xxx cards' only purpose is to supply the Chip ID to the Mark Vie system. The ID chip needs to be read to confirm that it has been programmed properly. Take the card over to the CHIP ID pc located in the MARK VI area of the shop and select the correct revision of IS200BVBG from the menu and follow the instructions given to you by the pc. When selecting which IS200BVBG to use, you may see a 5G or 7G next to the number. This refers to the serial number and whether it has 5 or 7 digits in it. Select the proper one, as you will be expected to type this number into the system at a given point. When entering this data, be sure to use all CAPITAL LETTERS as lower case might cause it not to agree with what's programmed in the chip. If the particular revision you need to select doesn't have a 5G or 7G next to it, get it added before proceeding.

6.2 Functional Testing

6.2.1 Install unit into Mark Vie TMR Test rack on appropriate terminal board.

6.2.2 Toolbox is setup to automatically configure and start using PAC Module. See note 7.2 for any questions.

6.3 Burn-In

6.3.1 Let unit run in test rack for 48 hours.

6.3.2 Testing is complete when unit successfully runs in test rack with no errors for 48 hours.

6.4 ***TEST COMPLETE ***

7. NOTES

7.1 Using this test procedure assumes you are familiar with ToolboxST. If assistance is needed, a knowledgeable person will be willing to assist.

8. ATTACHMENTS

8.1 None at this time.