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

Test Procedure for BSPCIA Printed Circuit Board

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Functional test procedure for BSPCIA Printed Circuit Board

1. SCOPE

1.1 This specification provides the Engineering Requirements for testing the BSPCIA printed circuit board. The process applies only to BSPCIA boards model number 44A294589-G01.

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 GEK-25322

3.1.2 GEK-25317

4. ENGINEERING REQUIREMENTS

4.1 Description

4.1.1 The 1050 Control is a solid-state, integrated circuit controller/processor system using LSI circuits for data processing and control. The static logic circuits are arranged on modular, plug in, printed circuit boards, clearly identified by type. The circuit boards are mounted with functional grouping. In addition, a board identification number marks each rack slot. The backplane consists of printed conductors arranged in a busing structure so that each slot is universal and can accept any board type. The 1050 control uses the AXIS2 board for controlling two or more axis drives.

4.2 Equipment Cleaning

4.2.1 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.

4.3 Equipment Inspection

4.3.1 Equipment should be visually inspected for any defects prior to applying power. This inspection should include the following as a minimum:

4.3.1.1 Wires broken or cracked

4.3.1.2 Terminal strips / connectors broken or cracked

4.3.1.3 Loose wires

4.3.1.4 Components visually damaged

4.3.1.5 Capacitors leaking

4.3.1.6 Solder joints damaged or cold

4.3.1.7 Circuit board burned or de-laminated

4.3.1.8 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	GE 1050MCCM	CPU3 Model
1	GE Computer Access Panel	External Interface
1	Diagnostic Tape Specific to Control	Diagnostic Tape

6. Testing

6.1 General

Testing the BSPCIA is done in two steps. The first step test: Test board with HUNTRON PROTRACK BSPCIA Scan Test. Second test is done in 1050MCCM Test Control.

6.2 HUNTRON SCAN TEST

6.2.1 Test board in HUNTRON PROTRACK with BSPCIA Scan Test. After board has passed.

6.3 Test in 1050MCCM Test Control.

6.3.1 Remove Master BSPCIA and install board to be tested.

6.3.2 Load Factory Diagnostic test tape 44S286980-X&C

6.3.3 After the Diagnostics has been loaded, the display should read "READY ENTER DATA".

6.3.4 On the control panel depress and release the following buttons;

6.3.4.1 OPTION STOP

6.3.4.2 "CYCLE START". When cycle start is released the test starts.

6.3.5 If board passed display should read "TOTAL ERROR 00"

6.3.6 Depress OPTION STOP

6.3.7 "NEXT"

6.3.8 "1"

6.3.9 "CYCLE START" this will start LOOP TEST. Run test for @ 1hour.

6.3.10 Diagnostic test is done.

6.3.11 Turn off Control and remove BSPCIA and replace Control's BSPCIA.

6.4 ******TEST COMPLETE ******

7. Notes

7.1 None at this time

8. References

8.1 None at this time