| g     | GE Energy  | Functional Testing Sp     | ecification |
|-------|--|---------------------------|-------------|
|       | Inspection & Repair Services<br>Louisville, KY                     | LOU-GEF<br>256 Char Displ | ay          |
|       | Test Procedure for 256 Charac                                      | cter Display              |             |
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| <b>DATE</b> 06/06/2005      | DATE        | DATE        | <b>DATE</b> 6/6/2005             |

LOU-GEF
256 Char Display
REV. A

GE Energy
Inspection & Repair Services
Louisville, KY

Functional test procedure for 256 Character Display.

#### 1. SCOPE

**1.1** This specification provides the Engineering Requirements for testing the 256 Character Display. The process applies only to the display model number 44A399680-001.

#### 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-36093 Diagnostic Software for 1050T Controls
3.1.2 GEK-71632 Diagnostic Software for 1050MC Controls

3.1.3 GEK-45668 Computer Access Panel

### 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 the local documented procedures 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

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## **EQUIPMENT REQUIRED**

**4.4** 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 1050T/MC                         | CPU3 Model                                  |
| 1   | GE Computer Access Panel            | External Interface                          |
| 1   | Diagnostic Tape Specific to Control | Diagnostic Tape                             |
| 1   | Display Tester                      | 32 & 256 Character Burroughs Display Tester |

## 5. TESTING PROCESS

- **5.1** Diagnostic Test
  - **5.1.1.1** Install display into the Burroughs Display Tester. Be sure to line display into socket correctly.
  - **5.1.1.2** Turn power on and press test. Characters should begin to scroll across screen.
    - 5.1.1.2.1 If there are any dead spots (not lines), hot spots, corners that appear to have faded, or sections faded, tube is probably bad and there is no replacement. The only alternative is an Argus Display from Carol Stream. If a line is out could be that the board is not lined up or resistor or transistor could be bad.
  - **5.1.1.3** If all checks out, burn in or run display for one hour.
  - 5.1.1.4 Run for one hour
- 5.2 \*\*\*TEST COMPLETE \*\*\*
- 6. REFERENCES