| g | GE E                                      | nergy | Functional Testing Specification |
|---|---|-------|----------------------------------|
|   |   |       |                                  |
|   | Parts & Repair Services<br>Louisville, KY |       | LOU-GED-173C5050SA               |

# Test Procedure for a capacitor assembly

| REV. | DESCRIPTION  | SIGNATURE | REV. DATE |
|------|--|-----------|-----------|
| Α    | Initial release  | J. Hardin | 07/7/2011 |
| В    | Changed a test point 6.1.3 from CBPL-12(+) to CBPL-10(+) | J. Hardin | 8/4/2011  |
| С    |  |           |           |

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| J. Hardin             | REVIEWED BY<br>R. Johnson | REVIEWED BY | Charlie Wade         |
|-----------------------|---------------------------|-------------|----------------------|
| <b>DATE</b> 07/7/2011 | <b>DATE</b> 7/7/2011      | DATE        | <b>DATE</b> 7/7/2011 |

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#### Functional test procedure for a Capacitor Bank

#### 1. SCOPE

**1.1** This is a functional testing procedure for a Capacitor Bank.

## 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 unit'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   |             | Fluke 85 DMM (or Equivalent) |
| 1   | H188703     | Sencore capacitor analyzer   |
|     |             |                              |
|     |             |                              |
|     |             |                              |

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### 6. TESTING PROCESS

- **6.1** Testing Procedure
  - 6.1.1 Measure resistance on resistors between terminal 1 and 3. Shall be around 10K,+/- 100 Ohms.
  - **6.1.2** If replacing capacitors double check capacitor polarity on all capacitors. Also check wire placement.
  - **6.1.3** Attach sencore to points CBPL-12 (-) and CBPL-10 (+). Press capacitor value button on sencore. Value should be 23000 uf (+/-1000uf).
  - **6.1.4** Attach sencore to points CBPL-12 (-) and CBPL-9 (+). Press capacitor value button on sencore. Value should be 23000 uf (+/-1000uf).
  - **6.1.5** Attach sencore on mounting fins on left side on the resistor end of the unit. Press capacitor value button on sencore. Value should be 12000 uf (+/-500uf).

## 6.2 \*\*\*TEST COMPLETE \*\*\*

#### 7. Notes

**7.1** None at this time.

#### 8. Attachments

**8.1** None at this time.