



GE Energy

## Functional Testing Specification

Parts & Repair Services  
Louisville, KY

LOU-GED-IS200TICI

## Test Procedure for a IS200TICI terminal board.

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DATE 9/21/2011	DATE	DATE	DATE 9/21/2011

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## 1. SCOPE

1.1 This is a functional testing procedure for a IS200TICI terminal board.

## 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	H188886	SIM035 Mark VI TMR System

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## 6. Modifications/Upgrades

6.1 Check Orange Book for any modifications or upgrades.

## 7. Testing Process

### 7.1 Setup

- 7.1.1 This card is tested in the Mark VI TMR Simulator System.
- 7.1.2 This card uses 120 VAC for stimulus. Make sure that the AC supply for card stimulus is in the off position before making or removing any connections. To turn off AC stimulus, find the switch above TRLY card located at 1E2 in TMR system. Power on is indicated by an illuminated green LED.
- 7.1.3 Place power switch in the off position.
- 7.1.4 Remove TB1, TB2, JS1, JR1 and JT1 from the TICI card located at location 2C2 in the TMR system.
- 7.1.5 Remove the two thumb screws securing the TICI to the panel and remove the card.
- 7.1.6 Install TICI to be tested, install the thumb screws and reconnect connections removed in step 7.1.4.
- 7.1.7 Turn on the 120 VAC stimulus by placing power switch in the ON position.

### 7.2 Testing Procedure

- 7.2.1 With ToolBox open and the TMR system online, open the VCCC graphics screen.
- 7.2.2 Clear any diagnostic alarms using the TMR reset panel.
- 7.2.3 If you see any red virtual LED's on the VCCC graphics screen at this time, reset them by pressing the LOGIC FAULT RESET.
- 7.2.4 Place the MANUAL/AUTO switch in the AUTO position.
- 7.2.5 Watch the green Virtual LED's, making sure they are following the correct pattern.
- 7.2.6 Any virtual RED LED that illuminates indicated a logic fault. The position of the LED indicates the circuit that caused the fault and must be repaired.
- 7.2.7 If unit runs with no fault indication, diagnostic alarm and is following the correct pattern, then the unit passes all functional testing.
- 7.2.8 There is a roll of 24 RED indicators to the left of the UUT. These indicators illuminate when the TRLY relays energize and the normally open contacts on the TRLY close. These are to verify TRLY relay signals and to help with troubleshooting. If the RED indicator to the left of the TICI card is on, then its respective output on the TICI card will be off.

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Note: Remember to turn off AC power before removing TICI from its test location.

**7.3** Post Testing Burn-in Required ☒ Yes ☐ No



Note: Unit should burn in for at least 1 hour.

**7.4 \*\*\*TEST COMPLETE \*\*\***

**8. Notes**

**8.1** None at this time.

**9. Attachments**

**9.1** None at this time.