



GE Energy

Functional Testing Specification

*Parts & Repair Services
Louisville, KY*

LOU-TOFFEE-IS215WETA

Test Procedure for an IS215WETAH1A/H1B cards tested on the Toffee System

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| REV. | DESCRIPTION | SIGNATURE | REV. DATE |
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| A | Initial release | P. Kelley | 6/20/2013 |
| B | Added special note to section 6; about four resistors | S. Cash/C. Wade | 6/5/2014 |
| C | Added test for feed thrus. | G. Chandler | 6/12/2015 |

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|---------------------------------|-------------------------------|--------------------|--|
| PREPARED BY P. Kelley | REVIEWED BY S. Cash | REVIEWED BY | QUALITY APPROVAL <i>Charlie Wade</i> |
| DATE 6/20/2013 | DATE 6/5/2014 | DATE | DATE 6/20/2013 |

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Functional test procedure for an IS215WETAH1A/H1B cards tested on the Toffee Test system

1. SCOPE

- 1.1 This is a functional testing procedure for the IS215WETAH1A and IS215WETAH1B Wind Application Control card.

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 the 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 or cracked
- 4.2.1.2 Terminal strips / connectors broken or cracked
- 4.2.1.3 Loose wires
- 4.2.1.4 Components visually damaged
- 4.2.1.5 Capacitors leaking
- 4.2.1.6 Solder joints damaged or cold
- 4.2.1.7 Circuit board burned or de-laminated
- 4.2.1.8 Printed wire runs burned or damaged

5. EQUIPMENT REQUIRED

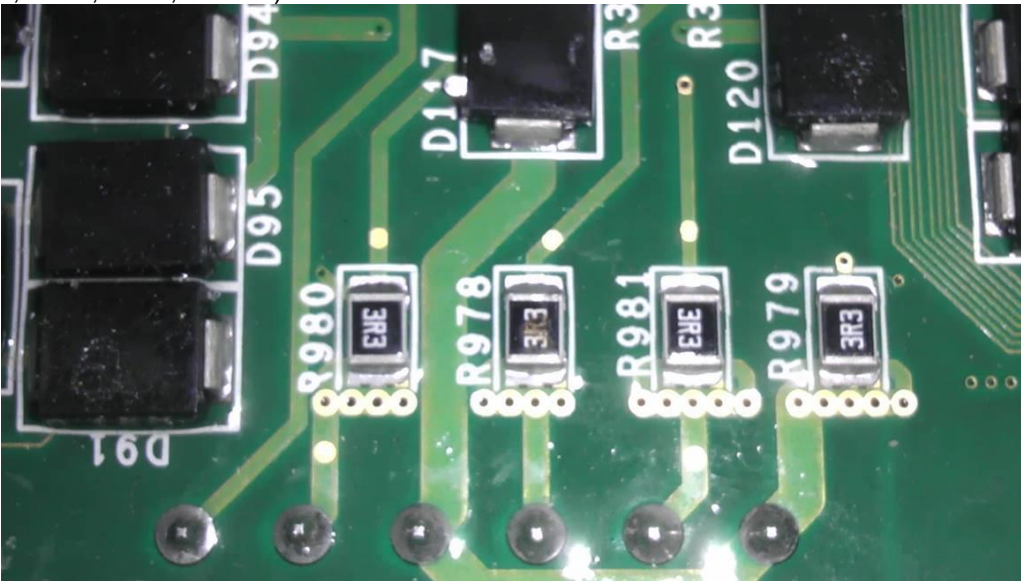
- 5.1 The following equipment is required to perform the process requirements. Equipment may be substituted provided that all accuracy's and test ratios are equivalent or better.

| Qty | Reference # | Description |
|-----|-------------|-----------------------------------|
| 1 | H188818 | Toffee Test System #14 |
| 1 | H190085 | Toffee test fixture for IS215WETA |
| 1 | | IS210BPPB card |

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6. TESTING PROCESS

Special Note: Technician found 3 WETA cards with an open resistor on what looks to be a supply voltage to several primarily speed sensors. This was after the cards had passed the Factory TOFFEE test. The component in question was R978 in the middle of the picture. Be sure to check all four of these resistors (R978, R979, R980, & R981).



6.1 Setup

- 6.1.1 Install IS215WETA fixture H190085 onto TOFFEE test System. Fixture is setup to run both the WETAH1A/H1B and the BPPB together.
- 6.1.1 Install Unit Under Test into test fixture. Plug the black and white wire into back of unit. Plug the red Ethernet cable into the receptacle on the left and the blue Ethernet cable into the right.

6.2 Testing Procedure

- 6.2.1 Double click on the OPERATOR INTERFACE icon on screen.
- 6.2.2 On the user name dialogue box, choose either administrator or technician. If administrator password is NGFT2008*, technician password is KISS, case sensitive. The next window should say configuration management and you should always click on no.
- 6.2.3 The next dialogue box should say select DUT (device under test). Detected fixture should have the model number being tested and family name should say MVe. Click the drop down box DUT and your model number should be the only

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option. Select it and it should appear in the DUT model number. Put your revision level of unit being tested in DUT REV and click ok.

6.2.4 A delay dialogue box appears, counts down and then asks for a serial number, enter the serial number of the UUT and check the boxes marked RUN UPLOADS and DELETED LOGS. Click ok. If you logged on as an administrator, you will not get this dialogue box. The test will automatically run these.

6.2.5 A delay dialog box appears and counts down, do not stop it and then system runs test. You will get either a pass or fail message.

6.2.6 Verify < 1 ohm between the following points:

J19-1 & P20-2

J19-1 & P19-11

J19-1 & P21-6

J19-3 & P20-4

J19-3 & P20-5

J19-3 & P21-7

J19-3 & P19-9

J19-3 & P19-10

6.3 *TEST COMPLETE *****

7. NOTES

7.1 Changes to the electronic Toffee test are recorded in the [Software Control Database](#)

8. ATTACHEMENTS

8.1 Picture of the Toffee Test System

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