



UNITED CONTROLS INTERNATIONAL

ENGINEERING EVALUATION REPORT

EER-14-94597-01

Revision 2

UCI Evaluation of Customer Returned Orders for Part 21 Evaluation

Prepared By: J. R. [Signature]
Engineering

Date: 5/30/14

Reviewed By: Diya Pandey
Engineering

Date: 5/30/14

Approved By: Kouma Wood
Quality Assurance

Date: 5/30/14

Revision History:

Date	Revision	Description
04/24/14	0	Initial Issue
05/16/14	1	Updated Part 21 evaluations for NCRs 3909 and 5670. Removed NCR 4679, this is for an international plant. Added Part 21 evaluation for job 95581 (NCRs 6189). NCR 7065 removed as it was a customer DNR and was voided. ECO# 205473
05/30/14	2	Remove Confidentiality statement as this EER is for Public Release with the UCI NRC Inspection Results. ECO# 205489

1.0: Customer:
UCI

2.0: Sales Order Numbers:

95443, 6144, 95581, 91103, 93049, 94597, 94900, 95108, 95245, 95581, 91103, 94860, 91980

3.0: NCR Numbers:

6256, 6916, 6331, 4679, 5180, 4980, 4413, 5669, 5670, 4924, 6189, 3905, 3909, 6029, 6859

4.0: References:

- A. UCI QCP 21.1
- B. UCI QCP 15.2
- C. UCI CAR 13-14

6.0: Description:

This engineering evaluation is being written to document the part 21 evaluations performed on the above listed NCRs and Sales Order Lines.

7.0: Technical Evaluation / Analysis / Disposition:

Per findings listed on the NRC Inspection Report 99901436-2014201 and the Notice of Violation received on 4/11/2014, UCI has reviewed all customer returned items for the past 3 years. This time frame was chosen as it covers all orders since the last NUPIC audit of UCI. The above listed NCRs were determined to need further evaluation to meet the requirements of UCI QCP 21.1, QCP 15.2 and 10CFR 21.21. Upon further evaluation, all orders were determined to have no defects and no reportable findings.

8.0 Conclusions:

As documented in the attached QA 21.1F Forms for all the NCRs listed in section 3.0 above, no defects were found after performance of the part 21 evaluation process.

9.0 Attachments:

1. Part 21 Evaluations for NCRs listed in section 3.

Attachment 1
Part 21 Evaluations



NCR No.: 4980/5180

NCR Rev.: 0

PART 21 EVALUATION REPORT

Discovery of Deviation Date: 4/22/14

Evaluation Due Date: 4/25/14

Evaluation Disposition: No Defect

Interim Report Required? N

Evaluation Disposition Complete By: [Signature]

Date: 4/22/14

Evaluation Disposition is (A) Not Capable:

Interim Report to Customer & NRC Due Date: N/A

Interim Report Submitted to Customer By: N/A Date: _____

Report #: N/A

Interim Report Submitted to NRC By: N/A Date: _____

Report #: N/A

Evaluation Disposition is (B) No Defect:

Evaluation Disposition Notes:

Relays, all from the same date code and that had manufacturing witnessed by UCI, underwent 100% functional testing and were all found to be in working order prior to shipment to the customer. When the customer notified UCI of the in storage bench test failure, UCI pulled an additional relay from the same date code from UCI stock. This relay had been kept in level B storage. The replacement relay was tested to the same dedication procedure and passed all testing. Due to the sensitive nature of these relays, UCI has concluded that the contact failure is an isolated incident that was caused by shipping and handling issues.

Evaluation Disposition is (C) Defect Exists :

Responsible Officer Notification Due Date: N/A

Responsible Officer Notified: N/A

Responsible Officer Notification Complete By: N/A Date: _____

Initial Notification to NRC Due Date: N/A

Initial Notification to NRC via Fax (301-816-5151) By: N/A Date: _____

Verification of Receipt of Initial Notification to NRC via Phone (301-816-5100) By: N/A Date: _____

Written Notification to NRC Due Date: N/A

Written Notification Sent to NRC By: N/A Date: _____



NCR No.: 4980/5180
NCR Rev.: 0

**PART 21 EVALUATION
REPORT**

CAR Required? N CAR Report #: N/A

Notes:

CAR 13-14

Part 21 Evaluation Complete By (QA): [Signature] Date: 4/30/14



NCR No.: 6029
NCR Rev.: 0

**PART 21 EVALUATION
REPORT**

Discovery of Deviation Date: 4/22/14 Evaluation Due Date: 4/25/14

Evaluation Disposition: No Defect Interim Report Required? N

Evaluation Disposition Complete By: [Signature] Date: 4/24/14

Evaluation Disposition is (A) Not Capable:

Interim Report to Customer & NRC Due Date: N/A

Interim Report Submitted to Customer By: N/A Date: _____

Report #: N/A

Interim Report Submitted to NRC By: N/A Date: _____

Report #: N/A

Evaluation Disposition is (B) No Defect:

Evaluation Disposition Notes:

The returned power supply was part of a blanket refurbishment order carried out by UCI. The failure was linked to a low voltage inside one of the control loops of the power supply. No other refurbished power supplies have been reported with this failure. The power supply was reworked to acceptable condition.

Evaluation Disposition is (C) Defect Exists :

Responsible Officer Notification Due Date: N/A

Responsible Officer Notified: N/A

Responsible Officer Notification Complete By: N/A Date: _____

Initial Notification to NRC Due Date: N/A

Initial Notification to NRC via Fax (301-816-5151) By: N/A Date: _____

Verification of Receipt of Initial Notification to NRC via Phone
(301-816-5100) By: N/A Date: _____

Written Notification to NRC Due Date: N/A

Written Notification Sent to NRC By: N/A Date: _____



NCR No.: 6029

NCR Rev.: 0

**PART 21 EVALUATION
REPORT**

CAR Required? N

CAR Report #: N/A

Notes:

[Empty rectangular box for notes]

Part 21 Evaluation Complete By (QA): KOWNA WOLF

Date: 4/22/14



NCR No.: 6331
NCR Rev.: 0

PART 21 EVALUATION REPORT

Discovery of Deviation Date: 4/22/14

Evaluation Due Date: 4/25/14

Evaluation Disposition: No Defect

Interim Report Required? N

Evaluation Disposition Complete By: *[Signature]*

Date: 4/22/14

Evaluation Disposition is (A) Not Capable:

Interim Report to Customer & NRC Due Date: N/A

Interim Report Submitted to Customer By: N/A Date: _____

Report #: N/A

Interim Report Submitted to NRC By: N/A Date: _____

Report #: N/A

Evaluation Disposition is (B) No Defect:

Evaluation Disposition Notes:

Item was found to be in working order during original dedication. No shorts were found during insulation testing during the original dedication. The item was originally shipped to the customer in 2003 and the failure at the customer site was in 2010. Failure analysis has determined that the shorted contacts are fused together. UCI's determination is that the failure is an isolated incident and most likely due to in proper installation or testing.

Evaluation Disposition is (C) Defect Exists :

Responsible Officer Notification Due Date: N/A

Responsible Officer Notified: N/A

Responsible Officer Notification Complete By: N/A Date: _____

Initial Notification to NRC Due Date: N/A

Initial Notification to NRC via Fax (301-816-5151) By: N/A Date: _____

Verification of Receipt of Initial Notification to NRC via Phone (301-816-5100) By: N/A Date: _____

Written Notification to NRC Due Date: N/A

Written Notification Sent to NRC By: N/A Date: _____



NCR No.: 6331
NCR Rev.: 0

**PART 21 EVALUATION
REPORT**

CAR Required? N

CAR Report #: N/A

Notes:

[Empty rectangular box for notes]

Part 21 Evaluation Complete By (QA): Korina Lopez

Date: 4/22/14



NCR No.: 4924

NCR Rev.: 0

PART 21 EVALUATION REPORT

Discovery of Deviation Date: 4/22/14

Evaluation Due Date: 4/25/14

Evaluation Disposition: No Defect

Interim Report Required? N

Evaluation Disposition Complete By:

[Signature]

Date:

4/22/14

Evaluation Disposition is (A) Not Capable:

Interim Report to Customer & NRC Due Date: N/A

Interim Report Submitted to Customer By: N/A

Date:

Report #: N/A

Interim Report Submitted to NRC By: N/A

Date:

Report #: N/A

Evaluation Disposition is (B) No Defect:

Evaluation Disposition Notes:

Additional locking mechanism found on the breakers was a configuration issue. This issue had no effect on the intended safety function of the breaker to trip and interrupt current when required.

Evaluation Disposition is (C) Defect Exists :

Responsible Officer Notification Due Date: N/A

Responsible Officer Notified: N/A

Responsible Officer Notification Complete By: N/A

Date:

Initial Notification to NRC Due Date: N/A

Initial Notification to NRC via Fax (301-816-5151) By: N/A

Date:

Verification of Receipt of Initial Notification to NRC via Phone (301-816-5100) By: N/A

Date:

Written Notification to NRC Due Date: N/A

Written Notification Sent to NRC By: N/A

Date:



NCR No.: 4924
NCR Rev.: 0

**PART 21 EVALUATION
REPORT**

CAR Required? N

CAR Report #: N/A

Notes:

[Empty rectangular box for notes]

Part 21 Evaluation Complete By (QA): Korina Wood

Date: 4/22/14



NCR No.: 4413
NCR Rev.: 0

PART 21 EVALUATION REPORT

Discovery of Deviation Date: 4/22/14

Evaluation Due Date: 4/25/14

Evaluation Disposition: No Defect

Interim Report Required? N

Evaluation Disposition Complete By: [Signature]

Date: 4/22/14

Evaluation Disposition is (A) Not Capable:

Interim Report to Customer & NRC Due Date: N/A

Interim Report Submitted to Customer By: N/A Date: _____

Report #: N/A

Interim Report Submitted to NRC By: N/A Date: _____

Report #: N/A

Evaluation Disposition is (B) No Defect:

Evaluation Disposition Notes:

The item passed all original dedication testing acceptably. Customer received item with apparent internal component damage and limited functionality. Because the item passed original UCI testing, and the internal parts shifted sometime between UCI testing and customer bench testing, UCI is reasonably assured that the item failure is due to shipping and handling issues.

Evaluation Disposition is (C) Defect Exists :

Responsible Officer Notification Due Date: N/A

Responsible Officer Notified: N/A

Responsible Officer Notification Complete By: N/A Date: _____

Initial Notification to NRC Due Date: N/A

Initial Notification to NRC via Fax (301-816-5151) By: N/A Date: _____

Verification of Receipt of Initial Notification to NRC via Phone (301-816-5100) By: N/A Date: _____

Written Notification to NRC Due Date: N/A

Written Notification Sent to NRC By: N/A Date: _____



NCR No.: 4413

NCR Rev.: 0

**PART 21 EVALUATION
REPORT**

CAR Required? N

CAR Report #: N/A

Notes:

[Empty rectangular box for notes]

Part 21 Evaluation Complete By (QA): Koruna Wofford

Date: 4/22/14



NCR No.: 6859
NCR Rev.: 0

PART 21 EVALUATION REPORT

Discovery of Deviation Date: 4/22/14

Evaluation Due Date: 4/25/14

Evaluation Disposition: No Defect

Interim Report Required? N

Evaluation Disposition Complete By: *[Signature]*

Date: 4/22/14

Evaluation Disposition is (A) Not Capable:

Interim Report to Customer & NRC Due Date: N/A

Interim Report Submitted to Customer By: N/A Date: _____

Report #: N/A

Interim Report Submitted to NRC By: N/A Date: _____

Report #: N/A

Evaluation Disposition is (B) No Defect:

Evaluation Disposition Notes:

Per UCI EER-11-5664-01 and CAR 61-13, the bloom found on the surface of the UCI Nuke Tape (UCI-003XS) did not have an adverse affect on its installed safety function and thus no defect exists.

Evaluation Disposition is (C) Defect Exists :

Responsible Officer Notification Due Date: N/A

Responsible Officer Notified: N/A

Responsible Officer Notification Complete By: N/A Date: _____

Initial Notification to NRC Due Date: N/A

Initial Notification to NRC via Fax (301-816-5151) By: N/A Date: _____

Verification of Receipt of Initial Notification to NRC via Phone (301-816-5100) By: N/A Date: _____

Written Notification to NRC Due Date: N/A

Written Notification Sent to NRC By: N/A Date: _____



NCR No.: 6859
NCR Rev.: 0

**PART 21 EVALUATION
REPORT**

CAR Required? Y CAR Report #: 61-13

Notes:

CAR 61-13 completed as of 2/18/2014

Part 21 Evaluation Complete By (QA): KORUNA WOOD Date: 4/22/14



NCR No.: 6256
NCR Rev.: 0

PART 21 EVALUATION REPORT

Discovery of Deviation Date: 4/22/2014

Evaluation Due Date: 4/25/14

Evaluation Disposition: No Defect

Interim Report Required? N

Evaluation Disposition Complete By: [Signature]

Date: 4/22/14

Evaluation Disposition Is (A) Not Capable:

Interim Report to Customer & NRC Due Date: N/A

Interim Report Submitted to Customer By: N/A Date: _____

Report #: N/A

Interim Report Submitted to NRC By: N/A Date: _____

Report #: N/A

Evaluation Disposition Is (B) No Defect:

Evaluation Disposition Notes:

Item was returned from customer due to workmanship and finish concerns. The item was not defective and was in full working order.

Evaluation Disposition Is (C) Defect Exists :

Responsible Officer Notification Due Date: N/A

Responsible Officer Notified: N/A

Responsible Officer Notification Complete By: N/A Date: _____

Initial Notification to NRC Due Date: N/A

Initial Notification to NRC via Fax (301-816-5151) By: N/A Date: _____

Verification of Receipt of Initial Notification to NRC via Phone (301-816-5100) By: N/A Date: _____

Written Notification to NRC Due Date: N/A

Written Notification Sent to NRC By: N/A Date: _____



NCR No.: 6256
NCR Rev.: 0

**PART 21 EVALUATION
REPORT**

CAR Required? Y

CAR Report #: 13-14

Notes:

CAR 13-14 was written in response to the NRC finding of deficiency part 21 evaluation of customer returned items. This NCR was identified as one that needed further evaluation.

Part 21 Evaluation Complete By (QA): Kouma 1007

Date: 4/2/14



NCR No.: 6189
NCR Rev.: 0

PART 21 EVALUATION REPORT

Discovery of Deviation Date: 4/22/14

Evaluation Due Date: 4/25/14

Evaluation Disposition: No Defect

Interim Report Required? N

Evaluation Disposition Complete By: [Signature]

Date: 4/22/14

Evaluation Disposition Is (A) Not Capable:

Interim Report to Customer & NRC Due Date: N/A

Interim Report Submitted to Customer By: N/A

Date: _____

Report #: N/A

Interim Report Submitted to NRC By: N/A

Date: _____

Report #: N/A

Evaluation Disposition Is (B) No Defect:

Evaluation Disposition Notes:

Mersen fuses were a buyout item. Mersen GDL1 fuses are bought by Mersen from Bel and are Bel 3SB fuses. An Equivalency Evaluation, EE-95581-01-01 was written to accept either marking on the fuses.

Evaluation Disposition Is (C) Defect Exists :

Responsible Officer Notification Due Date: N/A

Responsible Officer Notified: N/A

Responsible Officer Notification Complete By: N/A

Date: _____

Initial Notification to NRC Due Date: N/A

Initial Notification to NRC via Fax (301-816-5151) By: N/A

Date: _____

Verification of Receipt of Initial Notification to NRC via Phone (301-816-5100) By: N/A

Date: _____

Written Notification to NRC Due Date: N/A

Written Notification Sent to NRC By: N/A

Date: _____



NCR No.: 6189
NCR Rev.: 0

**PART 21 EVALUATION
REPORT**

CAR Required? N

CAR Report #: N/A

Notes:

[Empty rectangular box for notes]

Part 21 Evaluation Complete By (QA): KOUNA LODGE

Date: 4/22/14



NCR No.: 5669/5670

NCR Rev.: 1

PART 21 EVALUATION REPORT

Discovery of Deviation Date: 4/22/14

Evaluation Due Date: 4/25/14

Evaluation Disposition: No Defect

Interim Report Required? N

Evaluation Disposition Complete By: [Signature]

Date: 5/16/14
Revision to include
NCR # 5670. J6 5/16

Evaluation Disposition is (A) Not Capable:

Interim Report to Customer & NRC Due Date: N/A

Interim Report Submitted to Customer By: N/A Date:

Report #: N/A

Interim Report Submitted to NRC By: N/A Date:

Report #: N/A

Evaluation Disposition is (B) No Defect:

Evaluation Disposition Notes:

Item was tested upon return and no failures were observed. Destructive failure analysis testing was performed and no failures were observed. Failures reported by the customer could not be replicated through bench testing or witnessed manufacturer testing.

Evaluation Disposition is (C) Defect Exists :

Responsible Officer Notification Due Date: N/A

Responsible Officer Notified: N/A

Responsible Officer Notification Complete By: N/A Date:

Initial Notification to NRC Due Date: N/A

Initial Notification to NRC via Fax (301-816-5151) By: N/A Date:

Verification of Receipt of Initial Notification to NRC via Phone
(301-816-5100) By: N/A Date:

Written Notification to NRC Due Date: N/A

Written Notification Sent to NRC By: N/A Date:



NCR No.: 5669/5670

NCR Rev.: 1

**PART 21 EVALUATION
REPORT**

CAR Required? N

CAR Report #: N/A

Notes:

[Redacted Notes Box]

Part 21 Evaluation Complete By (QA):

Kouma Woff

Date: 5/16/14



NCR No.: 3905/3909
NCR Rev.: 1

PART 21 EVALUATION REPORT

Discovery of Deviation Date: 4/22/14

Evaluation Due Date: 4/25/14

Evaluation Disposition: No Defect

Interim Report Required? N

Evaluation Disposition Complete By: [Signature]

Date: 5/16/14
Revision to include
NCR # 3909. JG 5/16

Evaluation Disposition Is (A) Not Capable:

Interim Report to Customer & NRC Due Date: N/A

Interim Report Submitted to Customer By: N/A

Date: _____

Report #: N/A

Interim Report Submitted to NRC By: N/A

Date: _____

Report #: N/A

Evaluation Disposition Is (B) No Defect:

Evaluation Disposition Notes:

The fuse modules were returned due to aged components. It was determined that the aged components contributed to the failure of the boards.

Evaluation Disposition is (C) Defect Exists :

Responsible Officer Notification Due Date: N/A

Responsible Officer Notified: N/A

Responsible Officer Notification Complete By: N/A

Date: _____

Initial Notification to NRC Due Date: N/A

Initial Notification to NRC via Fax (301-816-5151) By: N/A

Date: _____

Verification of Receipt of Initial Notification to NRC via Phone (301-816-5100) By: N/A

Date: _____

Written Notification to NRC Due Date: N/A

Written Notification Sent to NRC By: _____

Date: _____



NCR No.: 3905/3909

NCR Rev.: 1

**PART 21 EVALUATION
REPORT**

CAR Required? N CAR Report #: N/A

Notes:

[Empty rectangular box for notes]

Part 21 Evaluation Complete By (QA): KOWNA WOFF

Date: 5/16/14



NCR No.: 6916
NCR Rev.: 1

PART 21 EVALUATION REPORT

Discovery of Deviation Date: 4/22/14

Evaluation Due Date: 4/25/14

Evaluation Disposition: No Defect

Interim Report Required? N

Evaluation Disposition Complete By: *[Signature]*

Date: 5/16/14
revision to include CAR #.
JRG 5/16

Evaluation Disposition is (A) Not Capable:

Interim Report to Customer & NRC Due Date: N/A

Interim Report Submitted to Customer By: N/A Date: _____

Report #: N/A

Interim Report Submitted to NRC By: N/A Date: _____

Report #: N/A

Evaluation Disposition is (B) No Defect:

Evaluation Disposition Notes:

Item was returned at UCI request as it was discovered that the associated hardware was not dedicated. Further testing was completed to dedicate the hardware and no failures of the hardware were discovered.

Evaluation Disposition is (C) Defect Exists :

Responsible Officer Notification Due Date: N/A

Responsible Officer Notified: N/A

Responsible Officer Notification Complete By: N/A Date: _____

Initial Notification to NRC Due Date: N/A

Initial Notification to NRC via Fax (301-816-5151) By: N/A Date: _____

Verification of Receipt of Initial Notification to NRC via Phone (301-816-5100) By: N/A Date: _____

Written Notification to NRC Due Date: N/A

Written Notification Sent to NRC By: N/A Date: _____



NCR No.: 6916
NCR Rev.: 1

**PART 21 EVALUATION
REPORT**

CAR Required? Y

CAR Report #: 52-13

Notes:

[Empty rectangular box for notes]

Part 21 Evaluation Complete By (QA): Korina Wood

Date: 5/16/14