



May 7, 2014  
Revised May 30, 2014

U.S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington DC 20555-001

RE: Reply to Notice of Violation: 99901436-2014-201-01

Revised to include Revision 2 of EER-14-94597 and Revision 1 of EER-1808-01 which removed confidentiality statements; refer to revision history in document for further details.

United Controls International (UCI) hereby submits its response to the NRC Inspection Report 99901436/2014201 and Notice of Violation received electronically on April 11, 2014. The enclosed response addresses the Notice of Violation 99901436-2014-201-01 in accordance with the directions provided in the Inspection Report.

UCI does not contest the Notice of Violation.

If you have any questions, please do not hesitate to contact me at (770)496-1406 ext. 140 or [klooft@unitedcontrols.com](mailto:klooft@unitedcontrols.com)

Sincerely,

A handwritten signature in black ink that reads 'Korina Looft'.

Korina Looft  
Quality Manager

Enclosures: UCI Response to Notice of Violation: 99901436-2014-201-01  
UCI CAR 13-14  
EER-14-1808-01  
EER-14-94597-01

Distribution: Richard A. Rasmussen, Chief  
Electrical Vendor Inspector Branch  
Division of Construction Inspection and Operational Programs  
Office of New Reactors

## UCI RESPONSE TO NRC NOTICE OF VIOLATION 99901436-2014-201-01

**Content of NOV**

Title 10 of the Code of Federal Regulations (10 CFR) 21.21, "Notification of failure to comply or existence of a defect and its evaluation," requires, in part, that "Each corporation, dedicating entity or other entities subject to the regulations in this part shall adopt appropriate procedures to evaluate deviations and failure to comply to identify defect and failure to comply associated with substantial safety hazards as soon as practicable."

Section 6.2 of UCI's Quality Control Procedure (QCP), QCP 21.1, "Reporting of Defects and Noncompliance", Revision 9, dated December 2, 2013, states, in part, that "all employees shall be responsible for reporting any deviations (as defined by this procedure) of nuclear related material or services in writing to the quality manager...this report shall be made soon as the deviation is detected, and evaluated as soon as practicable, and in all cases within 60 days.

Contrary to the above, as of February 28, 2014, in the following examples UCI failed to implement their procedures for performing evaluations of deviations and for determining whether such deviation constitute a substantial safety hazard.

1. On October 23, 2012, a customer returned to UCI a relay that was not operating correctly as per its technical requirements. This relay was part of a batch of relays that had been dedicated by UCI and supplied to customers as a basic component. UCI failed to evaluate within 60 days from the date of discovery whether the issue was specific to the returned relay, whether it constituted a substantial safety hazard or whether it could be generic to other relays supplied.
2. Prior to January 12, 2011, UCI performed seismic qualification tests on equipment with test accelerometers not calibrated for the full test range. UCI staff identified and corrected the deficiency; however, UCI failed to evaluate the deviation for reportability or document an analysis of the effect on seismic tests previously performed on safety related equipment.
3. In July 2013, UCI identified that the laboratory contracted to calibrate their Rockwell Hardness testing machine had not performed a proper calibration of the scale denoted as HRF. UCI failed to evaluate the deviation for the reportability or document an analysis of the effect on hardness tests previously performed on safety-related equipment.

UCI does not contest the Violation

**1a. The Reason for the Violation (reason for the violation, or, if contested, the basis for disputing the violation or severity level)**

- UCI failed to perform a Part 21 evaluation per QCP 21.1 or complete a failure analysis.
- The return process, QCP 14.1, did not clearly link evaluation of customer returns to completing the part 21 evaluation process. The training program did not adequately address how and when to perform part 21 evaluations.

**1b. Corrective Actions Completed (corrective action steps that have been taken and the result achieved)**

- UCI has opened Corrective Action: CAR 13-14.
  - a. Which includes a review and revision of QCP 21.1, "Reporting of Defects and Noncompliance", QCP 15.2, "Nonconformities", QCP 14.1, "Rework, Repair and/or Testing of Customer Supplied Items", and QCP 16.1 "Corrective Actions", and corresponding QA Forms to ensure a detailed process for Part 21 evaluations is imposed.
  - b. Training for all employees on revised QCPs and QA Forms.
  - c. Includes a review of NCRs which are due to a customer returned item, for the past 3 years to capture any items which may need further evaluation, since the last NUPIC audit. Results of this evaluation will be documented in EER-14-94597-01.
  - d. The relay was returned from the customer due to a failure during bench testing. An additional relay from the same date code had been stored at UCI under ANSI N45.2 level B conditions and was tested and dedicated and found to operate acceptably to the manufacturer's specifications. The manufacturing of this date code was witnessed by UCI at the manufacturer's facility. This additional relay was supplied to the customer as a replacement item. See the attached evaluation for determination of part 21 applicability.

**1c. Corrective Action to Prevent Recurrence (corrective steps that will be taken to avoid further violations)**

- a. Monthly NRC Compliance Panel Meeting to review all new NRC Part 21 Postings and Notifications for applicability if also supplied by UCI. Also a review of UCI NCRs opened for the month for accuracy and for part 21 evaluation applicability that were due to a customer return. (started: March 11, 2014)

**1d. Date Full Compliance will be Achieved**

- a. May 30, 2014
- b. May 30, 2014
- c. April 30, 2014

d. April 30, 2014

**2a. The Reason for the Violation (reason for the violation, or, if contested, the basis for disputing the violation or severity level)**

- It was discovered that all accelerometers used by UCI prior to 2008 to conduct seismic testing were only calibrated to a range of 10 to 4000 Hz. Once the oversight was realized in 2008, it was corrected.

**2b. Corrective Actions Completed (corrective action steps that have been taken and the result achieved)**

- UCI Completed EER-14-1808-01 to evaluate acceptability of the accelerometers. A Part 21 evaluation was also done as part of NCR 7161. No defect was found.
- All subsequent calibrations have been conducted over a range of 0.5 Hz to 4000 Hz. Because all accelerometers, when calibrated over the new expanded range, were found to be in tolerance across the entire range, it is reasonably assured that testing completed prior to the expanded calibration was acceptable.

**2c. Corrective Action to Prevent Recurrence (corrective steps that will be taken to avoid further violations)**

- All accelerometers have been calibrated to 0.5 HZ to 4000 Hz since 2008.

**2d. Date full Compliance will be achieved.**

- Achieved since 2008

**3a. The Reason for the Violation (reason for the violation, or, if contested, the basis for disputing the violation or severity level)**

- As stated in the NRC letter, UCI failed to perform an evaluation of the potential impact of the validity of a hardness test performed on items previously supplied. At the prompting of the inspectors, UCI completed an evaluation that concluded that this would not have been reportable since the indirect verification methodology was in compliance with ASTM E 18-12.

**3b. Corrective Actions Completed (corrective action steps that have been taken and the result achieved)**

- As part of the part 21 evaluation, a comparison of test results was performed between the supplier tool verified with the alternative procedure 1 ASTM E18-12 and a UCI tool verified with the indirect verification in section A1.4 of ASTM E18-12. Testing was completed on both machines using the same standardized NIST traceable 65.2 HRF test block. The test results of both tools were found to be within the acceptable tolerance range. No further evaluation is required. No defect was found.

**3c. Corrective Action to Prevent Recurrence (corrective steps that will be taken to avoid further violations)**

- All HRF Rockwell Hardness testing shall be performed in house, as UCI now has the capability.

**3d. Date full Compliance will be achieved.**

- Completed 4/17/14

**Conclusion**

In conclusion, UCI found no defects after the Part 21 evaluations had been conducted. Revision of affected QCPs are almost completed and will help ensure correct implementation of the Part 21 requirements, and monthly NRC compliance meetings will further ensure proper application of the Part 21 process.