

## Quad Cities 1 2Q/2014 Plant Inspection Findings

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### Initiating Events

**Significance:** G Jun 30, 2014

Identified By: Self-Revealing

Item Type: FIN Finding

#### **FAILURE TO FOLLOW VENDOR REQUIREMENTS LED TO FAST DOWNPPOWER**

A finding of very low safety significance was self-revealed when the licensee failed to re-establish oil level in accordance with vendor requirements in the Unit 2 Main Power Transformer (MPT-2) Conservator Oil Preservation System (COPS) tank after repairs were performed on the MPT-2 cooler group #4 upper isolation valve. Specifically, on May 12, 2014, the MPT-2 pressure relief device (PRD) actuated because of a high oil level in conjunction with higher temperature at full power operations. This resulted in operators reducing Unit 2 power to approximately 79 percent rated thermal power to reseal the PRD after venting approximately 20 gallons of oil. The licensee drained approximately 200 gallons of oil from the COPS tank prior to resuming full power operations. The licensee documented this issue in CAP as IR 1659110.

The licensee's failure to follow vendor manual requirements for filling MPT-2 with oil was a performance deficiency. The performance deficiency was determined to be more than minor, and a finding because it was associated with the Initiating Events Cornerstone Attribute of Procedure Quality and adversely affected the cornerstone objective to limit the likelihood of events that upset plant stability. The finding was determined to be of very low safety significance because each of the questions provided in IMC 0609, Appendix A, Exhibit 1 "Initiating Events Screening Questions" was answered "No". This finding has a cross-cutting aspect of field presence in the area of human performance for failing to ensure supervisory and management oversight of work activities, including contractors and supplemental personnel. Specifically, oversight of vendor activities during re-fill of the COPS tank failed to ensure that vendor guidance was used (H.2).

Inspection Report# : [2014003](#) (*pdf*)

**Significance:** G Mar 31, 2014

Identified By: NRC

Item Type: FIN Finding

#### **STEAM DRYER/STEAM SEPARATOR LIFTING DEVICE FAILURE TO MEET AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI) N14.6**

The inspectors identified a finding of very low safety significance (Green) involving the licensee's failure to demonstrate compliance with American National Standards Institute (ANSI) N14.6-1978, Section 3.2.1.1. Specifically, the licensee did not establish the design stress factors based on the fracture toughness characteristics of the socket pins, lock pins, and hook pins for the steam dryer/steam separator lifting device. This issue was entered into the licensee's corrective action program (CAP) as Action Request (AR) 1517114, "Dryer/Separator Strongback Calculation Discrepancies," dated May 23, 2013, and AR 1578475, "Dryer/Separator Strongback Pin Inspection Criteria," dated October 30, 2013.

The inspectors determined the finding to be more than minor because the finding was associated with the Initiating Events Cornerstone objective to limit the likelihood of events that upset plant stability and challenge critical safety functions during shutdown. Specifically, compliance with ANSI N14.6-1978, Section 3.2.1.1 is to ensure safe load handling of heavy loads over the reactor core, spent fuel, and/or safety-related systems through establishing the design based on the fracture toughness characteristics of the material. The inspectors determined the finding could be

evaluated using the Significance Determination Process in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Phase I -- Initial Screening and Characterization of Findings," Table 3. Since the finding was associated with shutdown conditions, the inspectors used IMC 0609, Appendix G, "Shutdown Operations Significance Determination Process." The inspectors determined that none of the conditions constituting a loss of control were met as described in Appendix G, Attachment 1, "Phase I Operational Checklists for Both PWRS and BWRS," for this finding and no Phase II or Phase III analysis was required. Specifically, the licensee provided information to inspectors that prior nondestructive examinations and inspections of the lifting device found no prior material defects. In addition, the licensee had not experienced any load drop events since placing the steam dryer/steam separator lifting device into service. The lifting device was also load tested successfully in accordance with the applicable requirements of ANSI N14.6. Therefore, the inspectors determined that this finding was of very low safety significance (Green). The inspectors did not identify a cross-cutting aspect associated with this finding because the concern was related to a design calculation from 2005, and thus was not necessarily indicative of current licensee performance.

No violation of regulatory requirements is associated with this finding based on the steam dryer/steam separator lifting device being a non-safety-related structural component.

Inspection Report# : [2014002](#) (*pdf*)

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## Mitigating Systems

**Significance:** G Jun 30, 2014

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

### **POST MAINTENANCE TEST FAILS TO ENSURE BATTERY CHARGER CAN PERFORM FUNCTION**

A finding of very low safety significance and associated non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was self-revealed for the licensee's failure to meet the requirements of MA-AA-716-012, "Post Maintenance Testing," which states, in part that post maintenance testing ensures that a component is able to perform its intended function and that the original deficiency is corrected. Specifically, licensee procedure QCEMS 0210-01 failed to include quantitative and qualitative acceptance criteria for determining that the Unit 1 250 VDC Battery Charger could perform its intended function. This issue was placed into the licensee's CAP as IR 1631541. Immediate corrective actions included replacing the float potentiometer in the battery charger circuitry, replacing a thyristor in the voltage regulation circuitry, and correcting a loose solder connection identified in the battery charger circuitry. Planned corrective actions include revising procedure QCEMS 0210-01 to include acceptance criteria that ensure the battery chargers can satisfactorily perform their intended function.

The finding was determined to be more than minor because the finding was associated with the Mitigating Systems Cornerstone attribute of equipment performance and affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The inspectors determined the finding could be evaluated using the SDP in accordance with IMC 0609, "Significance Determination Process," Appendix A, "The Significance Determination Process (SDP) for Findings At-Power." The inspectors answered, "No," to all of the Exhibit 2, "Mitigating Systems Screening Questions," in Section A and determined the finding was of very low safety significance. This finding had a cross-cutting aspect of design margins in the area of Human Performance because the licensee did not operate and maintain the battery charger within design margins. Specifically, the licensee's post maintenance testing acceptance criteria did not give them enough margin to prevent the battery from becoming inoperable (H.6).

Inspection Report# : [2014003](#) (*pdf*)

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## Barrier Integrity

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## Emergency Preparedness

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## Occupational Radiation Safety

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## Public Radiation Safety

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## Security

Although the Security Cornerstone is included in the Reactor Oversight Process assessment program, the Commission has decided that specific information related to findings and performance indicators pertaining to the Security Cornerstone will not be publicly available to ensure that security information is not provided to a possible adversary. Other than the fact that a finding or performance indicator is Green or Greater-Than-Green, security related information will not be displayed on the public web page. Therefore, the [cover letters](#) to security inspection reports may be viewed.

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## Miscellaneous

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