

# Quad Cities 1

## 3Q/2010 Plant Inspection Findings

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### Initiating Events

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### Mitigating Systems

**Significance:**  Dec 31, 2009

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

#### **FAILURE OF RHR TORUS SPRAY ISOLATION VALVE TO OPEN DUE TO DECLUTCH MECHANISM PROBLEMS**

A finding of very low safety significance and an NCV of TS 3.6.2.4, “Residual Heat Removal (RHR) Suppression Pool Spray,” was self-revealed for the licensee’s failure to meet the TS limiting conditions of operation (LCO) requirements prior to transitioning into an operating mode where the LCO was required to be satisfied. Specifically, Motor Operator (MO) 1-1001-37B was found to have been inoperable when the operating crew moved from Mode 4 to Mode 2 on May 30, 2009. The valve actuator had been inadvertently declutched (i.e. motor disengaged) and the valve was not demonstrated operable by stroking the valve electrically after the actuator motor was declutched. Inspectors determined that the finding was cross-cutting in the area of Problem Identification and Resolution - Corrective Action because plant personnel failed to identify the physical contact with the valve actuator that resulted in the valve being declutched; therefore, operators incorrectly assessed the system condition as in compliance with TS 3.6.2.4 (P.1(a)).

The finding is more than minor because it was associated with the equipment performance quality attribute of the Mitigating Systems cornerstone and affected the objective of ensuring availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, failure to verify system availability and capability prior to entering the required modes resulted in fewer available mitigating systems than assumed in the operating risk evaluations. The inspectors determined the finding could be evaluated using the SDP in accordance with IMC 0609, “Significance Determination Process,” Attachment 0609.04, “Phase 1 - Initial Screening and Characterization of findings,” Table 4a. Inspectors answered all of the questions for the Mitigating Systems cornerstone “No.” Therefore, the finding screened as Green or very low safety significance.

Inspection Report# : [2009005](#) (*pdf*)

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### Barrier Integrity

**Significance:**  Dec 31, 2009

Identified By: Self-Revealing

Item Type: FIN Finding

#### **DARLEY PUMP LEAKING GASOLINE FROM THE FUEL PUMP**

A finding of very low safety significance was self-revealed for the failure to perform maintenance that would ensure the pump was in a standby condition and readily available to accomplish the requirements of QCOA 0010-16, “Flood Emergency Procedure.” Although the staged portable pump would not have supported the external flooding emergency response procedure, no violation of regulatory requirements occurred. The inspectors did not identify a cross-cutting aspect associated with this finding because the issue is not reflective of current licensee performance. Immediate corrective actions included replacement of the degraded battery and overhaul of the pump’s fuel pump. Other actions included identification of preventative maintenance tasks and a program owner of the pump and support equipment.

This issue was more than minor because it was associated with the Structures, Systems, and Component (SSC) Performance attribute of the Barrier Integrity Cornerstone objective of maintaining the functionality of spent fuel pool cooling. The finding affected the cornerstone objective of providing assurance that physical design barriers protect the public from radionuclide releases caused by events including external flooding. Specifically, the pump could fail due to maintenance preventable component failure resulting in inadequate or degraded makeup to the spent fuel pool during an external flooding event. The inspectors determined the finding could be evaluated using the SDP in accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Phase 1 - Initial Screening and Characterization of findings," Tables 4a and 4b. The inspectors determined that even though this equipment is assumed to completely fail, the licensee could provide an alternate portable pump already located on site and capable of performing the safety function during this slow developing event. Since alternate equipment was available and the delay in mobilizing the alternate equipment would not have resulted in loss of capability to mitigate the impact of the flooding event, the issue is of very low safety significance or Green.

Inspection Report# : [2009005](#) (*pdf*)

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## Emergency Preparedness

**Significance:**  Jun 30, 2010

Identified By: NRC

Item Type: NCV NonCited Violation

### **INCORRECT WIND DIRECTION ON NARS FORM**

A NRC-identified finding of very low safety significance and associated NCV of 10 CFR 50.47(b)(9) was identified for delayed corrective action without appropriate compensatory actions for a defective computer point that sends wind direction data to the plant parameter display system (PPDS). This defective computer point resulted in incorrect wind direction on a Nuclear Accident Reporting System (NARS) form transmitted to the State of Illinois as part of the declaration of an Unusual Event on May 19, 2010. Corrective actions included the restoration of the computer point for PPDS. Inspectors identified this performance deficiency had a cross cutting aspect in Problem Identification and Reporting Evaluation because although the non functional computer point, R234, was identified in December 2009, the licensee failed to thoroughly evaluate, classify, and prioritize the condition of bad data from a computer point and assess how the condition affected PPDS (P.1(c)).

This finding is more than minor because the performance deficiency matches an example of a Green finding from IMC 0609, Appendix B, Section 4.9, page B 20, "Equipment or systems necessary for dose projection are not functional for longer than 24 hours from the TIME OF DISCOVERY without compensatory measures, or corrective actions are inadequate or delayed." Using IMC 0609, Appendix B, Sheet 1, "Failure to Comply Flowchart," the performance deficiency screened as very low safety significance, or Green.

Inspection Report# : [2010003](#) (*pdf*)

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## Occupational Radiation Safety

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## Public Radiation Safety

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## Physical Protection

Although the NRC is actively overseeing the Security cornerstone, the Commission has decided that certain findings pertaining to security cornerstone will not be publicly available to ensure that potentially useful information is not provided to a possible adversary. Therefore, the [cover letters](#) to security inspection reports may be viewed.

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# Miscellaneous

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