

D.C. Cook 1

1Q/2011 Plant Inspection Findings

Initiating Events

Mitigating Systems

Significance:  Oct 21, 2010

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate As-Found Heat Exchanger Inspection Guidance and Acceptance Criteria

The inspectors identified a finding having very low safety-significance and an NCV of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the licensee's failure to establish inspection procedures that were appropriate for the circumstances. Specifically, the licensee's heat exchanger inspection guidance and acceptance criteria could potentially result in the design basis tube plugging limit being exceeded due to the accumulation of macro fouling and as a result the heat exchanger would not be able to meet the design basis heat removal capability. This finding was entered into the licensee's corrective action program and a review of the heat exchanger tube plugging analysis identified additional margin to remain within its design basis heat removal capability.

The finding was more than minor because if left uncorrected, it would have the potential to lead to a more significant safety concern. This finding was of very low safety-significance (Green) because the licensee was able to demonstrate adequate margin and therefore there was not a design or qualification deficiency, did not represent a loss of system safety function, and did not screen as potentially risk significant due to a seismic, flooding, or severe weather initiating event. The finding had a cross-cutting aspect in the area of human performance because the licensee did not use conservative assumptions in decision making when developing the inspection guidance and acceptance criteria.

Inspection Report# : [2010006](#) (*pdf*)

Significance:  Jun 30, 2010

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Failure to Positively Identify Power Cable that was to be Removed and Replaced

A finding of very low safety significance (Green) with an associated Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures and Drawings," was self revealed. Specifically, licensee personnel failed to positively identify a power cable for Unit 1 AB emergency diesel generator fuel oil transfer pump 1 AB 2 while implementing a work order to remove and replace the power cable. Consequently, on April 5, 2010, the power cable for fuel oil transfer pump 1 AB 1 was cut instead of the power cable for pump 1 AB 2, which unknowingly rendered the Unit 1 AB emergency diesel generator inoperable and unavailable. Corrective actions included replacing the power cables for both fuel oil transfer pumps and correcting the labeling on the conduit. Additional planned corrective actions included revising drawings 1 1407 and 1 1407DR, and determining and implementing robust barriers to positively identify cables in the field before cutting or replacing them during planned maintenance activities. This issue was entered into the licensee's corrective action program as Action Request 2010 3656.

The inspectors determined that the performance deficiency was more than minor because it was associated with the human performance attribute of the Mitigating Systems Cornerstone and adversely affected the cornerstone objective of ensuring the availability of systems that respond to initiating events to prevent core damage. Specifically, the emergency diesel generator was unknowingly rendered inoperable and unavailable. This finding was of very low safety significance because a detailed Phase 3 Significance Determination Process analysis, assuming a 21 day exposure time, estimated the change in core damage frequency to be $4.6E-8$, reflecting a finding of very low safety significance (Green). The dominant cut sets involved station blackout scenarios: loss of offsite power, failure of

emergency power, and failure to recover either offsite or emergency power. The inspectors concluded that this finding has a cross-cutting aspect in the work practices component of the human performance cross cutting area. (H.4(a))
Inspection Report# : [2010003](#) (*pdf*)

Barrier Integrity

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

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.

Miscellaneous

Last modified : June 07, 2011