

Braidwood 2

3Q/2003 Plant Inspection Findings

Initiating Events

Significance:  Nov 29, 2002

Identified By: Self Disclosing

Item Type: FIN Finding

FEEDWATER OIL DRAIN VALVE INADVERTENTLY LEFT OPEN

A finding of very low safety significance was identified through a self-revealing event when the main control room received a low oil level alarm for the 2C turbine-driven feedwater pump. The alarm was caused by an oil drain valve being inadvertently left open by a non-licensed operator during planned maintenance occurring on the previous shift. The primary cause of this finding was related to the cross-cutting area of human performance, in that the plant operator did not use adequate self-checking to verify the oil drain valve was closed. This finding was more than minor because it increased the likelihood of a reactor trip event due to low steam generator level, and could have affected the availability of the main feedwater mitigating system due to the potential loss of the 2C turbine-driven feedwater pump from low lube oil pressure. The finding was of very low safety significance because the exposure time was short, all other mitigating systems were available, and the main feedwater system could have been recovered by fairly simple operator actions. The finding was not considered a violation of regulatory requirements.

Inspection Report# : [2002009\(pdf\)](#)

Mitigating Systems

Significance:  Sep 12, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

INSTRUMENTATION ASSUMPTION AT DEGRADED VOLTAGE NOT ADEQUATELY VERIFIED

A finding of very low safety significance was identified involving a Non-Cited Violation of 10 CFR 50, Appendix B, Criterion III, Design Control, for the failure to maintain an accurate design basis for instrumentation required to function at degraded voltage conditions.

This finding is greater than minor because the unverified assumption used in the degraded voltage calculation impacted the mitigating systems cornerstone objective of design control in that the instrumentation was not verified to operate under the design basis condition of degraded voltage. This finding is of very low safety significance because the licensee was able to subsequently verify, through calculation, that sufficient voltage was available under degraded voltage conditions to ensure the instrumentation would properly function. This issue was a design deficiency that was confirmed not to result in the loss of function in accordance with Generic Letter 91-18 (Revision 1).

Inspection Report# : [2003007\(pdf\)](#)

Significance:  Jul 11, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

MOLDED CASE CIRCUIT BREAKERS NOT PERIODICALLY CYCLED/EXERCISED

A finding of very low safety significance was identified by the inspectors for a violation of 10 CFR 50, Appendix B, Criterion XVI. The licensee failed to manually cycle/exercise numerous molded case circuit breakers (MCCBs) at the 120Vac, 125Vdc, and 480Vac voltage levels, on a pre-established periodic basis, as recommended by the MCCBs manufacturer, by NEMA AB-4, and as required by the Braidwood Station's Safe Shutdown Analysis.

This issue was more than minor because if this concern is not corrected in a timely manner and the MCCB trip points drifts too high, or fails to trip, the breaker may fail to clear a load fault, as designed, and may trip the upstream motor control center (MCC) feed breaker resulting in the loss of the entire associated MCC. The issue was of very low safety significance because it did not result in loss of function per Generic Letter 91-18. This issue was a non-cited violation of 10 CFR 50, Appendix B, Criterion XVI.

Inspection Report# : [2003005\(pdf\)](#)



Significance: Jul 11, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

FAILURE TO ASSESS AND ADDRESS COORDINATION CALCULATION

CONCLUSIONS/RECOMMENDATIONS

A finding of very low significance was identified by the inspectors for a violation of 10 CFR 50, Appendix B, Criterion XVI. The licensee failed to assess and resolve recommendations to correct conditions adverse to quality as noted in the conclusion section of Calculation BYR 98-293/BRW 98-1287-E, dated October 1, 2001. The purpose of the calculation was to evaluate the 125Vdc and 120Vac circuits that supply safe shutdown equipment for adequate coordination such that a fire induced fault will not impact the shutdown capability of the plant.

This issue is greater than minor because if these potential breaker coordination deficiencies were not corrected in a timely manner the undersized breaker may fail to clear a load fault and may trip the upstream MCC feed breaker resulting in the loss of the entire associated MCC. The issue was of very low safety significance because it did not result in loss of function per Generic Letter 91-18. The issue was a non-cited violation of 10 CFR 50, Appendix B, Criterion XVI.

Inspection Report# : [2003005\(pdf\)](#)

Barrier Integrity

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

Physical Protection

Miscellaneous

Last modified : December 01, 2003