Byron 1
1Q/2010 Plant Inspection Findings

Initiating Events

Significance: G Mar 31, 2010
Identified By: NRC
Item Type: NCV NonCited Violation
FIRE BARRIER WITH UNSEALED PENETRATION BETWEEN UNIT 1 AF PUMP ROOMS
The inspectors identified a finding of very low safety significance and associated NCV of the Byron Unit 1 Operating License (OL), Condition 2.C.(6) for failure to comply with the fire barrier sealing requirements of the fire Protection Program (FPP). Specifically, a temporary rigging support used during initial construction was left in place and unsealed through a wall separating the Unit 1 Train A Auxiliary Feedwater (AF) pump room from the Unit 1 Train B AF pump room. The licensee entered the issue into the ocrrective action program (CAP) and sealed the fire barrier penetration.

This finding is more than minor because it was associated with the external factor attribute of the Initiating Events cornerstone and affected the cornerstone objective to limit the liklihood of those events that upset plant stability and challenge critical safety significance because there was not a significant degradation of the gaseous suppression system and the fire barrier degradation was also screened to Green due to the lack of a credible fire damage state (FDS) 3 scenario. This finding does not have a cross-cutting aspect due to its age.
Inspection Report# : 2010002 *(pdf)*

Significance: G Sep 30, 2009
Identified By: NRC
Item Type: NCV NonCited Violation
INADEQUATE EVALUATION OF SEISMIC RESTRAINT ON THE FHB CRANE TROLLEY
A finding of very low safety-significance and associated Non-Cited Violation (NCV) of 10 CFR Part 50, Appendix B, Criterion III, “Design Control,” was identified by the inspectors for failure to perform an adequate evaluation of seismic restraint on the Fuel Handling Building (FHB) crane trolley. Specifically, for evaluation of the seismic restraint in their single failure proof trolley analysis, the licensee failed to use adequate seismic acceleration values and failed to evaluate the connections for resulting reaction forces. Subsequent review found that the restraint was inadequate. The licensee documented the condition in Issue Report (IR) 934467 and initiated actions for calculation revision and installation of a field modification.
The inspectors determined that the failure to perform an adequate analysis for the seismic restraint and its connections for seismic loads was contrary to American Society of Mechanical Engineers (ASME) NOG-1-2004, requirements and was a performance deficiency. The FHB crane is designed to Seismic Category I requirements and the licensee used compliance with ASME NOG-1-2004, as the design basis for their upgrade to a single failure proof crane. The finding was more than minor because it was associated with the Initiating Events cornerstone attribute of Equipment Performance, Refueling/Fuel Handling equipment, and affected the cornerstone objective to limit the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. The inspectors evaluated the finding using Inspection Manual Chapter 0609.04, “Phase 1 - Initial Screening and Characterization of Findings,” and based on a “No” answer to all the questions in the Initiating Events column of Table 4a, determined the finding to be of very low safety-significance (Green). This finding has a cross-cutting aspect in the area of Human Performance, Work Practices because the licensee did not provide adequate oversight of work activities, including contractors, such that nuclear safety is supported. H.4(c)
Inspection Report# : 2009004 *(pdf)*

Significance: G Sep 01, 2009
Identified By: NRC
Item Type: NCV NonCited Violation

Untimely Corrective Actions for Sprinkler Obstructions
The inspectors identified a Green NCV of Byron License Condition 2.C.(6) for Unit 1 for failure to take timely corrective actions as described in the Fire Protection Program to address a previously issued NCV regarding sprinkler obstruction by scaffolding in the 1A diesel oil storage tank room. Specifically, the licensee did not fully evaluate the issue before reinstalling a different type of scaffold planks. After the licensee concluded the plank was not acceptable, there was no full extend of condition walkdown until 5 months later and no modification to the scaffold until the inspectors identified the condition in August 2009. The initial violation was originally identified by NRC inspectors in April 2008.

This finding is more than minor because it was associated with the external factor attribute of the Initiating Events (IE) cornerstone and affected the cornerstone objective to limit the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. The finding is of very low safety significance because it has a low degradation rating as only one out of 11 sprinklers in the room was obstructed and there was another functional head within 10 feet of the combustible concern. This finding has a cross-cutting aspect in the area of Human Performance for Resources (H.2(a)) because the licensee failed to minimize long standing equipment issue. The licensee immediately removed the scaffold obstruction and entered this issue into the CAP as Issue Report (IR) 953448. (Section 4OA2.3)
Inspection Report# : 2009008 *(pdf)*

Significance: G Jun 30, 2009
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO COMPLY WITH TS 3.4.13.B RCS PRESSURE BOUNDARY LEAKAGE
A finding of very low safety significance and associated Non-Cited Violation of Technical Specification 3.4.13.B was identified by the NRC inspectors on June 26, 2009, when RCS pressure boundary leakage was identified but not repaired or isolated within the Technical Specification Limiting Condition for Operation requirement of 6 hours. The inspectors concluded that the finding was greater than minor in accordance with Appendix E of IMC 0612, because example 2 not minor if Technical Specification limits were exceeded reflected the issue identified. The finding was determined to be of very low safety significance after a Phase 2 screening and the issue has been entered into the licensee's corrective action program as Issue Report (IR) 934800. The primary cause for this finding was related to the cross-cutting area of Human Performance and its associated component for Decision Making. (H.1(b)) because licensee management personnel concluded that this leak did not represent Reactor Coolant System pressure boundary leakage due to the closure of an isolation valve. (Section 1R15)

Inspection Report# : 2009003 *(pdf)*

Mitigating Systems

Significance: G Dec 31, 2009
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO COMPLY WITH 10 CFR PART 26.203(b)(2)
The inspectors identified a finding of very low safety significance and the associated NCV of 10 CFR Part 26.203(b)(2),"Procedures," for the licensee's failure to adhere to work hour rule procedures. Specifically, a licensed reactor operator who was working an outage work hour schedule on Unit 1 was assigned as the online unit, Unit 2, Assist Operator without meeting the online work hour requirements. Subsequently, the licnesee clarified the requirements for scheduling personnel and entered this issue into their corrective action (CAP) program as Issue Report (IR) 882727.

The finding was more than minor because the finding could lead to a more significant safety concern. The finding is of very low safety significance because there were additional operators in the control room that satisfied the work hours requirements and the operators were required to perform peer check before any control room equipment manipulation were taken. This finding has a cross-cutting aspect in the area of Human Performance, Resources Component (H.2(b)), because there were insufficient qualified personnel to maintain work hours within the working

hours guidelines.
Inspection Report# : 2009005 *(pdf)*

Significance: G Sep 30, 2009
Identified By: NRC
Item Type: NCV NonCited Violation
DIESEL OIL STORAGE VENTS DO NOT SEISMICALLY QUALIFIED OR TORNADO RESISTANT
A finding of very low safety significance and associated NCV of 10 CFR 50, Appendix A, Criterion 2, “Design basis for protection against natural phenomena,” and Criterion 4, “Environmental and natural effects design bases,” was identified by the inspectors for the failure to seismically support and protect from tornado generated missiles the DG fuel oil storage tank vent lines. Specifically, the licensee installed the vent lines as non-safety related and as such they were not seismically supported nor protected from tornado generated missiles. In response to the issue, the licensee performed an operability determination and concluded that the DGs remained operable.
This performance deficiency was more than minor because it was associated with the Mitigating Systems Cornerstone attribute of equipment performance and adversely affected the cornerstone objective of ensuring availability of the DG to respond to initiating events to prevent undesirable consequences. This finding was of very low safety significance (Green) because the inspectors determined that the finding was a design deficiency confirmed not to result in loss of operability or functionality and the finding screened as Green using the Significance Determination Process Phase 1 screening worksheet. The inspectors did not identify a cross cutting aspect associated with this finding because the performance deficiency occurred over 30 years ago and was not current.

Inspection Report# : 2009004 *(pdf)*

Barrier Integrity

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

Significance: G Dec 31, 2009
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO COMPLY WITH 10 CFR PART 20 APPENDIX G
The inspectors identified a finding of very low safety significance and the associated NCV of 10 CFR Part 20, Appendix G, Section III.A.3. Specifically, the licensee did not establish a Quality Assurance Program sufficiently to assure conformance with 10 CFR 61.55, in that, the program was not adequate to identify incorrect waste stream data was used to determine the concentrations of radionuclides, and ultimately ensure waste was properly classified, in accordance with 10 CFR 61.55. The licensee entered the deficiency into its CAP (IR 950082) and re-evaluated these shipments using the appropriate waste stream radionuclide distribution and correctly determined that the waste classification remained Class C.

The failure to establish an adequate 10 CFR Part 61 Quality Assurance Program, to assure conformance with 10 CFR 61.55, is a performance deficiency that was reasonably within the licensee's ability to foresee and correct, which

should have been prevented. The finding is more than minor because, if left uncorrected the performance deficiency could have the potential to lead to a more significant safety concern. This finding was determined to be of very low safety-significance because no radiation limits were exceeded, there was no breach of packaging, there was no package certificate of compliance finding, there was no low level burial ground non-conformance, and no failure to make notifications or provide emergency information. The cause of this finding was related to the cross-cutting area of Human Performance, Resources (H.2(b)) due to inadequate training and insufficient qualified personnel.
Inspection Report# : 2009005 *(pdf)*

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

Significance: N/A Sep 01, 2009
Identified By: NRC
Item Type: FIN Finding
PI&R Summary
The inspectors concluded that the licensee's corrective action program (CAP) in general was effective in identifying, evaluating and correcting issues at the site. The licensee had a low threshold for identifying issues and entering them into the CAP. Overall, the issues were properly prioritized and evaluated based on plant risk and uncertainty. Corrective actions, when specified, were generally implemented in a timely manner, commensurate with their safety consequences. The use of operating experience was found to be effective and was integrated into daily activities. In addition, the licensee's self-assessments, audits and effectiveness reviews were thorough and effective in identifying site performance deficiencies, programmatic concerns and improvement opportunities. On the basis of the interviews conducted, site personnel were free to raise safety concerns through the established processes.
Inspection Report# : 2009008 *(pdf)*

Last modified : May 26, 2010