Beaver Valley 1
3Q/2011 Plant Inspection Findings

Initiating Events

Mitigating Systems

Significance: G Jun 17, 2011
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO VERIFY THE DESIGN REQUIREMENTS FOR THE FUEL OIL TRANSFER PUMPS
The team identified a finding of very low safety significance involving a non-cited viotation (NCV) of 10 CFR 50, Appendix B, Criterion lll, "Design Control" because FENOC did not verify or check the adequacy of the Unit 1 emergency diesel generator (EDG) fuel oil transfer system design. Specifically, FENOC did not ensure adequate net positive suction head (NPSH) for the fuel oil transfer pumps during worst case design conditions, and did not evaluate the effect air voids in the suction piping would have on the pumps. FENOC entered the issue into the corrective action program, and performed testing on the fuel oil transfer system and consulted with the pump vendor to determine if the design of the system was adequate. Following completion of the testing and new calculations, FENOC determined that the pumps were operable but degraded.
The team determined that the issue was more than minor because it was associated with the Mitigating Systems Cornerstone attribute of Design Control and adversely affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The finding was of very low safety significance (Green) because it was a design deficiency confirmed not to result in a loss of operability or functionality. The team determined that there was not a crosscutting aspect associated with this finding because it was not indicative of current performance.
Inspection Report# : 2011007 *(pdf)*

Significance: G Dec 31, 2010
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
FAILURE TO FOLLOW PROCEDURE RESULTS IN MAIN FEEDWATER PIPING PRESSURIZATION
A self-revealing non-cited violation (NCV) was identified in that a chemical addition pump [1WT-P-15B] was misaligned to an isolated main feed water header, and upon starting caused an unexpected pressure transient, which affected the ‘B’ Fast Acting Main Feedwater Isolation Valve (HYV-1FW-100B) (MFIV). Specifically, the main feed water piping was inadvertently isolated and pressurized beyond its normal operating pressure, causing significant packing leakage of the ‘B’ MFIV. This issue was entered into the licensee’s corrective action program under CR 10-84891.
Traditional enforcement does not apply because the issue did not have an actual safety consequence or the potential for impacting NRC’s regulatory function, and was not the result of any willful violation of NRC requirements. The inspectors determined that the finding was not similar to the examples for minor deficiencies contained in IMC 0612, Appendix E, “Examples of Minor Issues”. The finding was more than minor because it is associated with the equipment performance attribute of the Mitigating Systems cornerstone and affects the availability, reliability and capability of systems that respond to initiating events to prevent undesirable consequences.
The inspectors performed a Phase 1 SDP evaluation in accordance with IMC 0609, Appendix G, Attachment 1, Checklist 3 “PWR Cold Shutdown and Refueling Operation RCS Open and Refueling Cavity Level <23’ OR RCS Closed and No Inventory in Pressurizer with Time to Boiling <2 hours.” There was no loss of control, and all

mitigating capabilities were available, therefore a Phase 2 quantitative assessment was not required and the issue screened to Green (very low safety significance).
The cause of this finding relates to the cross-cutting aspect of Human Performance, Work Practices, in that FENOC did not utilize human error prevention techniques, pre-job brief and peer checking, to prevent the misalignment of the chemical addition pump.

Inspection Report# : 2010005 *(pdf)*

Significance: G Dec 09, 2010
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
INADEQUATE SPRAY ADDITIVE SYSTEM SAMPLING PROCEDURES
A Green, self-revealing non-cited violation (NCV) of TS 5.4.1, “Procedures”, was identified in that chemistry procedures failed to provide adequate detail to ensure timely completion of TS required sampling of the spray additive system. Specifically, FENOC failed to complete timely sampling and analysis of the chemical addition tank, resulting in reasonable doubt of the operability of the spray additive system for 13 days. The issue was entered into the licensee’s corrective action program under CR 10-87438.

Traditional enforcement does not apply because the issue did not have an actual safety consequence or the potential for impacting NRC’s regulatory function, and was not the result of any willful violation of NRC requirements. The finding is more than minor because it is similar to example 3.j in IMC 0612, Appendix E and it is associated with the equipment performance attribute of the Mitigating Systems cornerstone and affects the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences.

In accordance with IMC 0609.04 (Table 4a), Phase 1 – Initial Screening and Characterization of Findings,” the finding was determined to be of very low safety significance (Green) because the finding was not a design or qualification deficiency which resulted in a loss of safety function.

The cause of this NCV relates to the cross-cutting aspect of Problem Identification and Resolution, Corrective Action Program, in that FENOC personnel did not implement a corrective action program with a low threshold for identifying issues. FENOC did not identify the issue completely, accurately and in a timely manner commensurate with its safety significance.[P.1.(a)]
Inspection Report# : 2011002 *(pdf)*

Barrier Integrity

Significance: G Dec 31, 2010
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
MAX DIFFERENTIAL TEMPERATURE EXCEEDED FOR SPRAY NOZZLE DURING PRESSURIZER HEAT UP
A self-revealing non-cited violation (NCV) of TS 5.4.1, “Procedures”, was identified in that the shift technical advisor’s (STA) failure to follow procedure resulted in the maximum differential temperature being exceed on the spray nozzle during pressurizer heat up. Specifically, the STA failed to notify the shift manager promptly when it became apparent that the maximum differential temperature of the spray nozzle trend was degrading and its limit subsequently exceeded. This issue was entered into the licensee’s corrective action program under CR 10-85021.
Traditional enforcement does not apply because the issue did not have an actual safety consequence or the potential for impacting NRC’s regulatory function, and was not the result of any willful violation of NRC requirements. The inspectors determined that the finding was not similar to the examples for minor deficiencies contained in IMC 0612, Appendix E, “Examples of Minor Issues”. The finding was more than minor because if left uncorrected, had the potential to lead to a more significant safety concern. The inspectors performed a Phase 1 SDP evaluation in accordance with IMC 0609, Appendix G, Attachment 1, Checklist 4 “PWR Refueling Operation: RCS level > 23' or PWR Shutdown Operation with Time to Boil > 2 hours And Inventory in the Pressurizer.” There was no loss of

control, all mitigating capabilities were available, therefore a Phase 2 quantitative assessment was not required and the issue screened to Green (very low safety significance).
The cause of this NCV relates to the cross-cutting aspect of Human Performance, Resources, in that FENOC personnel were not adequately trained to recognize the indications being monitored, resulting in the pressurizer spray nozzle maximum differential temperature being exceeded. [H.2.(b)]

Inspection Report# : 2010005 *(pdf)*

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

Significance: G Jun 30, 2011
Identified By: NRC
Item Type: FIN Finding
Untimely Radiation Monitor Corrective Actions
A Green, NRC identified finding (FIN) was identified in that plans and actions to correct long-standing radiation monitor system instrumentation deficiencies were not accomplished in a timely manner, in accordance with FENOC CAP procedure NOP-LP-2001. Specifically, FENOC failed to correct and return to service radiation monitor instruments for the Unit 1 and Unit 2 RSS HX [RM-1RW-100A,B,C,D and 2SWS-RQ100A,B,C,D], in a timely manner, requiring maintenance of alternate monitoring and challenges to assessing radiation detection and assessment during accident situations. This issue was entered into the licensee's corrective action program under CR(s) 11-91673 and 11-89700.

Traditional enforcement does not apply because the issue did not have an actual safety consequence or the potential for impacting NRC's regulatory function, and was not the result of any willful violation of NRC requirements. The inspectors determined that the finding was not similar to the examples for minor deficiencies contained in IMC 0612, Appendix E, "Examples of Minor Issues". The finding is more than minor because it affects the Public Radiation Safety cornerstone. The finding is associated with the attribute of plant equipment and instrumentation (process radiation monitors) attribute of the Public Radiation Safety cornerstone to ensure adequate protection of public health and safety from exposure to radioactive materials released into the public domain as a result of routine civilian nuclear reactor operation.

In accordance with IMC 0609.04 (Table 3a), "Phase 1 – Initial Screening and Characterization of Findings," the finding was evaluated using IMC 0609 Appendix D, "Public Radiation Safety Significance Determination Process" and determined to be of very low safety significance (Green) because the finding was not a failure to implement the effluent program or cause any public dose to be exceeded.

The cause of this NCV relates to the cross-cutting aspect of Problem, Identification, and resolution, Corrective Action Program, in that FENOC personnel did not take timely corrective actions to develop and implement actions for long-standing radiation monitor deficiencies. [P.1(d)] (Section 4OA2)
Inspection Report# : 2011003 *(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

Last modified : January 04, 2012