

# Beaver Valley 1

## 1Q/2011 Plant Inspection Findings

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### Initiating Events

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### Mitigating Systems

**Significance:**  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:**  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)

**Significance:**  Sep 05, 2010

Identified By: Self-Revealing

Item Type: FIN Finding

### **INADEQUATE MAINTENANCE PROCEDURE RESULTS IN AUTO-DISASSEMBLY OF EDG INTAKE DAMPER**

A Green, self-revealing finding (FIN) was identified in that an inadequate procedure resulted in a failure to adequately retain a 1-1 EDG room damper after louver adjustment. Specifically, the adjustment of the 1-1 EDG upper damper (1VS-D-22-2A) in April 2010 led to retention hardware not being sufficiently secure to prevent damper failure and resulted in the linkage failing to open the upper dampers. This was self-revealing during a crew investigation for a 1-1 EDG alarm on September 5, 2010. This issue was entered into the licensee’s corrective action program under CR 10-82257.

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 associated with the procedure quality 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).

The cause of this finding relates to the cross-cutting aspect of Human Performance, Resources, in that FENOC did not provide complete procedures to conduct the damper adjustment and retention. [H.2.(c)]

Inspection Report# : [2010004](#) (pdf)

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## **Barrier Integrity**

**Significance:**  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*)

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## **Emergency Preparedness**

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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**

Last modified : June 07, 2011