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August 22, 2002  
BW020094

U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, D.C. 20555-001

Braidwood Station, Unit 1  
Facility Operating License No. NPF-72  
NRC Docket No. STN 50-456

Subject:      Reply to a Notice of Violation

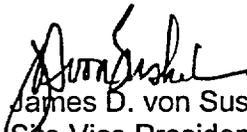
Reference:    Letter from G. E. Grant (NRC Region III) to J. L. Skolds (Exelon Generation Company, LLC), "Final Significance Determination for a White Finding and Notice of Violation (NRC Inspection Report No. 50-456/02-03; 50-457/02-03) (Braidwood Station, Unit 1)," dated July 23, 2002

In the referenced letter, based on the results of an inspection, the NRC determined that Braidwood Station was in violation of Criterion XVI, "Corrective Action," of 10 CFR 50, Appendix B, for failure to correct and prevent recurrence of Unit 1 pressurizer power operated relief valve (PORV) air accumulator check valve leak-through between 1991 and 2001.

The attachment to this letter contains our response to the Notice of Violation.

If you have any questions regarding this reply, please contact Amy Ferko, Regulatory Assurance Manager, at (815) 417-2699.

Respectfully,

  
James D. von Suskil  
Site Vice President  
Braidwood Station

Attachment:    Reply to Notice of Violation

cc:      Regional Administrator - NRC Region III  
          NRC Senior Resident Inspector - Braidwood Station

JLE01

## ATTACHMENT

### Reply to Notice of Violation

In a letter from G. E. Grant (NRC Region III) to J. L. Skolds (Exelon Generation Company, LLC), dated July 23, 2002, the NRC issued a Notice of Violation. The violation of NRC requirements was identified during an NRC inspection conducted on February 4, 2002 through February 22, 2002 and is provided below:

"10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," requires, in part, that conditions adverse to quality be promptly identified and corrected. In the case of significant conditions adverse to quality, the measures shall assure that the cause of the condition is determined and corrective actions taken to preclude repetition.

Contrary to the above, between April 1991 and October 1995, the licensee failed to correct and prevent recurrence of the Unit 1 pressurizer power operated relief valve (PORV) air accumulator check valves leak-through, a significant condition adverse to quality. Specifically, Unit 1 pressurizer relief valves failed to meet testing acceptance criteria in April 1991, October 1992, April 1994, January 1995, October 1995, October 1998, and September 2001. This resulted in several extended periods where the unit was operated in a condition where the pressurizer PORVs may not have been able to perform their intended safety function of opening following events which resulted in isolation of instrument air to the containment or loss of the service air compressors.

This violation is associated with a White SDP finding."

#### Response:

The following is our response to the Notice of Violation.

#### Reason for the violation.

The failure to correct and prevent recurrence of the Unit 1 PORV air accumulator check valve leak-through was due to ineffective corrective actions. The Unit 1 PORV air accumulator check valves had a history of surveillance test failures dating to 1991, but the actual root cause of the check valve failures was not determined until a recent root cause investigation (RCI) was completed on May 24, 2002.

#### The corrective steps that have been taken and the results achieved.

The RCI determined that the check valve failures were caused by incorrect valve tolerances that resulted in valve disc o-ring interference with the valve seat. This disc o-ring interference coupled with the large number of valve cycles that occur during air accumulator refill caused the disc o-ring to dislocate.

During the fall, 2001 Unit 1 refueling outage, the check valve maintenance and testing sequence was performed such that the as-left valve testing was performed after all activities that may have resulted in cycling of the check valves were completed. The Unit 1 valves are operable as demonstrated by the successful as-left check valve testing.

The corrective steps that will be taken to avoid further violations.

The procedure governing the testing sequence for routine and post maintenance testing will be revised to ensure that testing is scheduled so that the final operability testing is performed following all maintenance activities, as was done during the fall, 2001 Unit 1 refueling outage.

The RCI revealed that the approved maintenance procedure for maintaining the check valves was not used during past maintenance on the check valves. By not using the approved maintenance procedure, incorrect valve tolerances resulted. The model work orders for pressurize PORV air accumulator check valves will be revised to ensure the correct maintenance procedure is used for all check valve maintenance.

The Unit 1 check valve tolerances will be corrected and the check valve discs will be replaced with an improved design recommended by the manufacturer.

The date when full compliance will be achieved.

The procedure governing the testing sequence will be revised by September 30, 2002. The model work orders will be revised by December 13, 2002. The Unit 1 check valve tolerance adjustments and disc replacements will be completed during the next Unit 1 refueling outage, currently scheduled for April, 2003.