

# Duquesne Light Company

Beaver Valley Power Station  
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July 27, 1994

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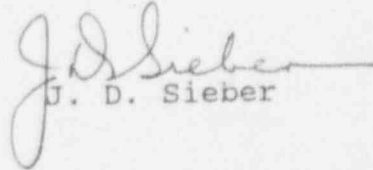
U. S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, DC 20555

Subject: Beaver Valley Power Station, Unit No. 2  
Docket No. 50-412, License No. NPF-73  
Combined Inspection Report 50-334/94-11 and 50-412/94-11  
Reply to Notice of Violation

In response to NRC correspondence dated June 27, 1994, and in accordance with 10 CFR 2.201, the attached reply addresses the Notice of Violation transmitted with the subject inspection report.

If there are any questions concerning this response, please contact Mr. N. R. Tonet at (412) 393-5210.

Sincerely,

  
J. D. Sieber

Attachment

cc: Mr. L. W. Rossbach, Sr. Resident Inspector  
Mr. T. T. Martin, NRC Region I Administrator  
Mr. G. E. Edison, Project Manager  
Mr. J. C. Linville, Chief, Projects Branch No. 3  
Division of Reactor Projects, Region I

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DUQUESNE LIGHT COMPANY  
Nuclear Power Division  
Beaver Valley Power Station Unit No. 2

Reply to Notice of Violation

Combined Inspection Report 50-334/94-11 and 50-412/94-11  
Letter dated June 27, 1994

VIOLATION 1 (Severity Level IV, Supplement I)

Description of Violation (50-412/94-11-01)

10 CFR 50, Appendix B, Criterion III (Design Control) requires, in part, that measures be established to assure that applicable regulatory requirements and design bases for those structures, systems, and components to which the appendix applies are correctly translated into specifications, drawings and instructions. Table 8.1-1 of the Unit 2 Updated Final Safety Analysis Report lists NRC Branch Technical Position (BTP) ICSB 18 as a design basis document applicable to onsite Class-1E AC power systems. NRC BTP ICSB 18 specifies protection from single active failure for safety systems.

Contrary to the above, the licensee failed to completely incorporate NRC BTP ICSB 18 into Design Change Package 2040. This design change removed the high head safety injection alternate minimum flow system from service leaving the charging pump vulnerable to a single active failure of the minimum flow discharge header isolation valve 2CHS-MOV373.

Reason for the Violation

The violation was determined to be due to an insufficient design review prior to initiating the modification of the charging system mini-flow recirculation flow path under Minor Design Change Package 2040 (MDCP 2040).

Corrective Action Taken

1. Upon identification of the failure to incorporate NRC BTP ICSB 18 into MDCP 2040 on February 21, 1994, the Nuclear Safety Department initiated Problem Report 2-94-33 for investigation of the problem.
2. In order to protect the charging pumps from a single active failure of 2CHS\*MOV373, this valve was deenergized in the open position on February 21, 1994. This action placed 2CHS\*MOV373 into a passive state thereby eliminating it from the "active valve" consideration of BTP ICSB 18. In addition, the radiological and environmental qualification implications of leaving 2CHS\*MOV373 deenergized open were evaluated and it was determined that no adverse consequences would result.

Corrective Action Taken (Continued)

3. After determining that the plant was outside of its design basis, a one hour 10 CFR 50.72(b)(1)(ii)(B) report was made on March 10, 1994. Licensee Event Report (LER) 94-002-00 was submitted on April 10, 1994 in accordance with 10 CFE 50.73(a)(2)(ii).

Actions Taken to Prevent Recurrence

1. The Independent Safety Evaluation Group (ISEG) performed a root cause evaluation of the event. Their conclusions concurred with those described in the LER.
2. Engineering Administrative Procedure NEAP 2.2 "Design Change Control" was revised, effective June 28, 1994, to include consideration of the single failure analysis of Class 1E systems including NRC BTP ICSB 18.
3. Classroom training for Nuclear Engineering Department (NED) engineers was conducted on the need to consider all applicable inputs in the design control process, including applications of the single failure criterion as outlined in NRC BTP ICSB 18.
4. Plant documents (Operating Manual and applicable drawings, UFSAR and the charging system Design Basis Document (DBD)) will be revised as necessary to reflect that 2CHS\*MOV373 is deenergized open and, to include consideration of NRC BTP ICSB 18.
5. A change request for Beaver Valley Unit 2 Technical Specification 4.5.2 will be submitted to include 2CHS\*MOV373 as a valve with power removed.

Date When Full Compliance Will Be Achieved

With 2CHS\*MOV373 in the deenergized open position, the single failure criterion of BTP ICSB 18 is presently being satisfied.

The Beaver Valley Unit 2 (BV-2) Operating Manual and applicable drawings will be revised by December 31, 1994.

The BV-2 UFSAR will be revised in the next annual update scheduled for April, 1995.

The DBD for the BV-2 charging system will be revised by December 31, 1994.

A change request for BV-2 Technical Specification 4.5.2 will be submitted to the NRC by April 30, 1995.

VIOLATION 2 (Severity Level IV, Supplement I)

Description of Violation (50-412/94-11-02)

Beaver Valley Unit 2 Technical Specification Table 3.3-1, "Reactor Trip System Instrumentation," Action 2.b.1, requires that with the number of operable power range channels one less than the total number of channels and with the thermal power level above five percent, operation may continue provided the inoperable channel is placed in a tripped condition within one hour.

Contrary to the above, on April 12, 1994, power range neutron monitor channel N-42 was placed in an inoperable condition during the calibration of the delta-flux circuitry; and, while operating at full power, the reactor trip function for high neutron flux was not placed in a tripped condition within one hour.

Reason for the Violation

On April 12, 1994, I&C technicians performed calibration procedure 2MSP-2.04 on power range neutron monitor channel N-42, which was consistent with technical specification interpretation letter ND1NSM:3496 dated September 14, 1988. A concern with the acceptability of this interpretation was noted by the NRC Resident Inspectors at an exit meeting on April 20, 1994.

This interpretation was rescinded; however, I&C personnel were under the assumption that the interpretation was still in effect and scheduled a performance of the corresponding procedure on Beaver Valley Unit 1 (BV-1) nuclear instrumentation for April 25, 1994. The status of this technical specification interpretation was not adequately disseminated to all affected departments.

Corrective Action Taken

Additional instructions were added to the Maintenance Work Request (MWR) and the channel was placed in the required condition to comply with TS Table 3.3-1, Action 2.b.1 requirements.

Actions Taken to Prevent Recurrence

1. The maintenance surveillance procedures at BV-1 and BV-2 associated with nuclear instrumentation channels N-41, N-42, N-43, and N-44 were revised to comply with the technical specifications.

Actions Taken to Prevent Recurrence (Continued)

2. Technical Specification Change Request No. 1A-173/2A-35 was submitted to the NRC on October 22, 1993 for both units to allow one nuclear instrumentation channel to be inoperable for up to six hours without placing the inoperable channel in a tripped condition.
3. Additional guidance will be incorporated into Nuclear Power Division Administrative Procedure (NPDAP) 7.1, "Technical Specification Control Program," to provide for dissemination of technical specification interpretations to appropriate departments.

Date When Full Compliance Will Be Achieved

Calibration of nuclear instrumentation at both units is currently being performed in compliance with technical specification requirements.

A revision to NPDAP 7.1 will be issued by October 31, 1994.