

August 27, 1997

Mr. J. E. Cross  
President  
Generation Group  
Duquesne Light Company  
Post Office Box 4  
Shippingport, Pennsylvania 15077

SUBJECT: INSPECTION REPORT NOS. 50-334;412/97-01-02 - REPLY

Dear Mr. Cross:

This letter refers to your August 1, 1997, correspondence, in response to our July 3, 1997, letter.

Thank you for informing us of the corrective and preventive actions documented in your letter. These actions will be examined during a future inspection of your licensed program.

Your cooperation with us is appreciated.

Sincerely,

*original signed*  
*by*

Peter W. Eselgroth, Chief  
Project Branch No. 7  
Division of Reactor Projects

Docket Nos. 50-334; 50-412

cc:

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J. E. Cross

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# Duquesne Light Company

Beaver Valley Power Station  
P.O. Box 4  
Shippingport, PA 15077-0004

RONALD L. LeGRAND  
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August 1, 1997  
L-97-001

U. S. Nuclear Regulatory Commission  
Attention: Document Control Desk  
Washington, DC 20555-0001

**Subject: Beaver Valley Power Station, Unit No. 1 and No. 2**  
**BV-1 Docket No. 50-334, License No. DPR-66**  
**BV-2 Docket No. 50-412, License No. NPF-73**  
**Reply to Notice of Violation EA 97-255**


In response to NRC correspondence dated July 3, 1997, and in accordance with 10 CFR 2.201, the attached reply addresses the Notice of Violation transmitted with the letter.

The cited events were discussed in NRC Inspection Report Nos. 50-334/97-01, 50-412/97-01 and 50-334/97-02, 50-412/97-02 and also during a Predecisional Enforcement Conference held on June 13, 1997.

Please note that some of the completion dates for the programmatic enhancements to the Technical Specification surveillance program have been revised from the dates discussed in the Predecisional Enforcement Conference to reflect changes in work scope. The specific revisions are identified in the body of the response. These changes also supersede the applicable dates provided in Licensee Event Reports (LER) 50-334/97-011-00 (Corrective Action No. 2), LER 50-334/97-013-00 (Corrective Action No. 6), LER 50-334/97-014-00 (Corrective Action No. 5), and LER 50-412/97-003-00 (Corrective Action No. 5).

If there are any questions concerning this response, please contact Mr. J. Arias, Director, Safety & Licensing at (412) 393-5203.

Sincerely,

  
Ronald L. LeGrand

9908110063 rpp.  
c: Mr. D. M. Kern, Sr. Resident Inspector  
Mr. H. J. Miller, NRC Region I Administrator  
Mr. D. S. Brinkman, Sr. Project Manager





DUQUESNE LIGHT COMPANY  
Nuclear Power Division  
Beaver Valley Power Station, Unit Nos. 1 and 2

Reply to Notice of Violation  
Letter dated July 3, 1997

VIOLATION (Severity Level III; Supplement I)

EA 97-255

Unit 1 and Unit 2 Technical Specification (TS) 4.0.2 require that, each surveillance requirement shall be performed within the specified time interval.

1. Unit 1 TS 4.8.1.1.2.b.5 requires that each diesel generator shall be demonstrated OPERABLE at least once per 18 months during shutdown by verifying the diesel generator operates for greater than or equal to 60 minutes while loaded to greater than or equal to 2750 KW.

Contrary to the above, on April 11, 1996, and April 20, 1996, during emergency diesel generator (EDG) surveillance tests, the load test values used were inadequate to ensure that the EDGs achieved 2750 KW due to inaccuracies in the kilowatt meter instrument loop. Specifically, the EDGs had to be tested to at least 2875 KW to account for meter inaccuracies; however, EDG 1-1 was tested at 2850 KW on April 20, 1996, and EDG 1-2 was tested at 2800 KW on April 11, 1996. These were the only EDG surveillance tests performed to meet TS 4.8.1.1.2.b.5 during the 18-month period. (01013)

2. Unit 1 and Unit 2 TS 4.4.6.3.1 require, in part, that leakage testing of reactor coolant system (RCS) pressure isolation valves (PIVs) listed in Table 4.4-3 shall be accomplished prior to entering Mode 2 after every time the plant is placed in the COLD SHUTDOWN condition for refueling. Unit 1 TS Table 4.4-3 includes, in part, residual heat removal (RHR) system inlet isolation valves MOV-RH-700 and MOV-RH-701. Unit 2 TS Table 4.4-3 includes, in part, RHR system inlet isolation valves 2RHS-MOV701A, 2RHS-MOV702A, 2RHS-MOV701B, and 2RHS-MOV702B.

Contrary to the above, Unit 1 reactor coolant system (RCS) pressure isolation valves MOV-RH-700 and 701 were not leak tested prior to entering Mode 2, after placing the unit in cold shutdown on March 23, 1996. Additionally, Unit 2 RCS pressure isolation valves 2RHS-MOV701 A(B) and 2RHS-MOV702A(B) were not leak tested prior to entering Mode 2, after placing the unit in cold shutdown on September 1, 1996. (01023)

3. Unit 1 and Unit 2 TS 4.6.4.2.b.4 require that each hydrogen recombiner system shall be demonstrated OPERABLE at least once per 18 months by verifying the integrity of all heater electrical circuits by performing a continuity and resistance to ground test immediately following the functional test required by TS 4.6.4. 2.b.3.

Contrary to the above, on March 24, 1996, the integrity of Unit 1 hydrogen recombiner 1A and 1B heater circuitry was not verified immediately following the functional tests of the recombiners. On September 1, 1996, the integrity of Unit 2 hydrogen recombiner 21A and 21B heater circuitry was not verified immediately following the functional tests of the recombiners. (01033)

4. Unit 1 and Unit 2 TS 4.3.1.1.1 require that each reactor trip system instrumentation channel shall be demonstrated OPERABLE by the performance of the CHANNEL CHECK, CHANNEL CALIBRATION, and CHANNEL FUNCTIONAL TEST operations during the modes and at the frequencies shown in Table 4.3-1.

Unit 1 and Unit 2 TS 4.3.2.1.1 require that each engineered safety feature actuation system (ESFAS) instrumentation channel shall be demonstrated OPERABLE by the performance of the CHANNEL CHECK, CHANNEL CALIBRATION, and CHANNEL FUNCTIONAL TEST operations during the modes and at the frequencies shown in Table 4.3-2.

Unit 1 and Unit 2 TS 4.3.2.1.2 require that the logic for the interlocks shall be demonstrated OPERABLE during the at power CHANNEL FUNCTIONAL TEST of channels affected by interlock operation.

Contrary to the above, prior to March 24, 1997, and March 27, 1997, respectively, the Unit 1 and Unit 2 reactor coolant system loop stop valve position block signals were not tested during bimonthly channel functional testing for ESFAS instrumentation, and channel functional testing for reactor trip system instrumentation. In addition, an ESFAS P-4 interlock logic diode in the Unit 1 and Unit 2 solid state protection system logic circuits was not tested during channel functional testing. These testing omissions resulted in failure to demonstrate the interlock logic and the interlock function operable. (01043)

5. Unit 1 and Unit 2 TS 4.0.5.a.2 require that inservice testing of ASME Code Class 1, 2, and 3 pumps and valves shall be performed in accordance with Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda as required by 10 CFR 50.55a(f).

Unit 1 TS 4.7.7.2.b.1 requires that the bottled air pressurization system shall be demonstrated OPERABLE at least once per 18 months by verifying that a chlorine/control room high radiation/containment phase B isolation test signal from

either Unit will initiate system operation. Unit 2 TS 4.7.7.1.e.6 requires that the Control Room Emergency Air Cleanup and Pressurization System shall be demonstrated OPERABLE at least once per 18 months by verifying that a chlorine/control room high radiation/containment phase B isolation signal will initiate operation of the bottled air pressurization system.

Operating Surveillance Test 1/2OST-44A.11, "Chlorine Actuation of Control Room Isolation/CREBAPS Systems," implements the surveillance requirements and requires that the stroke times for the discharge trip valves do not exceed a prescribed ASME limiting stroke time. The test also requires that, if the discharge trip test valves exceed their previously recorded stroke times by greater than 50%, the test frequency will be increased to monthly.

Contrary to the above, CREBAPS discharge trip valves TV-VS-101 B, D, and E were not stroke time tested between January 29 and March 22, 1997, following a 50% stroke time increase measured during performance of 1/2OST-44A.11 on January 28, 1997. (01053)

6. Unit 1 TS 4.1.2.2.b and Unit 2 TS 4.1.2.1.b require that at least one of the required boron injection flow paths shall be demonstrated OPERABLE at least once per 31 days by verifying that each valve (manual, power operated or automatic) in the flow path that is not locked, sealed or otherwise secured in position, is in its correct position.

Contrary to the above, prior to March 25, 1997, the monthly boron injection flowpath operability verifications were not satisfactorily completed. Specifically, position verifications for boron injection flowpath valves MOV-1CH-289 and 310 and 1CH-83 and 86 on Unit 1 and 2CHS-MOV289 and 310 on Unit 2 (valves which were not locked or secured in position) were not performed. (01063)

These violations are classified in the aggregate as a Severity Level III problem (Supplement I).

#### Reason for the Violations

The root cause of the violations was inadequate management oversight and control of the TS surveillance program. Contributing factors were weaknesses in the procedures, scheduling, coordination and communication processes used for surveillance testing.

Corrective Actions Taken and Results Achieved

1. The specific details regarding this violation including corrective actions were provided by Licensee Event Report (LER) 50-334/97-002-00 dated March 19, 1997.
2. The specific details regarding this violation including corrective actions were provided by LER 50-334/97-003-00 dated March 24, 1997.
3. The specific details regarding this violation including corrective actions were provided by LER 50-334/97-004-00 dated March 28, 1997.
4. The specific details regarding this violation including corrective actions were provided by LER 50-334/97-006-00 dated April 21, 1997.
5. The specific details regarding this violation including corrective actions were provided by LER 50-334/97-007-00 dated April 21, 1997.
6. The specific details regarding this violation including corrective actions were provided by LER 50-334/97-008-00 dated April 22, 1997.

An assessment of the TS surveillance requirements for Units 1 and 2 was performed by the Quality Services Unit by April 10, 1997. This assessment reviewed each TS surveillance requirement to determine if the wording implied that the surveillance was to be performed in a specific scheduling sequence or if it was mandated following a specific plant event. This assessment was reviewed by Operations, and procedure changes were initiated to incorporate clarifications when necessary.

Actions Taken to Prevent Recurrence

The following programmatic enhancements to the TS surveillance program are being made:

- An evaluation of the adequacy of surveillance procedures that implement TS will be conducted to ensure that the procedures implement the required testing. This evaluation and appropriate procedure revisions will be completed for Units 1 and 2 by January 30, 1998.
- The current processes for revising/preparing TS surveillance procedures will be revised to include a technical review led by the System and Performance Engineering Department (SPED) for intent changes. These processes will be revised by August 29, 1997. This date has been revised from the July 31, 1997 date discussed at



the Predecisional Enforcement Conference on June 13, 1997, due to changes in work scope.

- The coordination and scheduling process for TS surveillances will be centralized under the responsibility of the Work Management Manager. Additional resources will be allocated to incorporate the surveillance schedule into the on-line scheduling system. These improvements will be completed by November 30, 1997. This date has been revised from the July 31, 1997 date discussed at the Predecisional Enforcement Conference, due to changes in work scope.

A self-assessment of the TS surveillance program will be conducted during the second quarter of 1998. Any significant deficiencies resulting from this self-assessment will be addressed through the Condition Report program.

#### Date When Full Compliance Will Be Achieved

Full compliance was achieved for each of the six violations discussed above with the completion of the immediate corrective actions for the LERs referenced above.

The procedure revisions that are being made as a result of the Operations review of the QSU assessment will be completed by October 1, 1997.

The programmatic enhancements to the TS surveillance program will be completed as follows:

- The evaluation of the adequacy of TS surveillance procedures and appropriate procedure revision will be completed for Units 1 and 2 by January 30, 1998.
- The processes for revising/preparing TS surveillance procedures will be revised to include a technical review led by SPED for intent changes by August 29, 1997.
- The coordination and scheduling process for TS surveillances will be improved by November 30, 1997.

The self assessment of the TS surveillance program will be completed by June 30, 1998.