



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 200 TO FACILITY OPERATING LICENSE NO. DPR-66

DUQUESNE LIGHT COMPANY
OHIO EDISON COMPANY
PENNSYLVANIA POWER COMPANY

BEAVER VALLEY POWER STATION, UNIT NO. 1

DOCKET NO. 50-334

1.0 INTRODUCTION

By letter dated February 12, 1996, the Duquesne Light Company (the licensee) submitted a request for changes to the Beaver Valley Power Station, Unit No. 1 Technical Specifications (TSs). The requested changes would revise TS 4.6.2.2.d and associated Bases to delete the reference to the specific test acceptance criteria for the containment recirculation spray pumps and replace the specific test acceptance criteria with reference to the requirements of the Inservice Testing (IST) Program. In addition, the 18-month test frequency would be replaced with the test frequency requirements specified in the IST Program. The proposed amendment would make this TS the same as Beaver Valley Power Station, Unit No. 2 TS 4.6.2.2.d which was issued by License Amendment No. 68 to Facility Operating License No. NPF-73 on May 3, 1995.

2.0 BACKGROUND

The function of the containment recirculation spray system pumps is to take suction from the containment sump and discharge water to the spray rings located in the containment dome during a design basis accident. The sprayed water provides cooling for the containment atmosphere and will return the containment atmosphere to and maintain the containment atmosphere at a negative pressure with respect to the outside atmosphere after initial depressurization by the quench spray system and the recirculation spray system.

The recirculation spray system consists of four 50 percent capacity subsystems with each subsystem composed of a spray pump, associated heat exchanger and flow path. Two of the recirculation spray pumps and motors are located outside containment (RS-P-2A and RS-P-2B) and two pumps and motors are located inside containment (RS-P-1A and RS-P-1B). The flow path from each pump is piped to an individual 180° recirculation spray header inside containment. Train "A" electrical power and river water is supplied to the subsystems containing recirculation spray pumps RS-P-1A and RS-P-2A. Train "B" electrical power and river water is supplied to the subsystems containing recirculation spray pumps RS-P-1B and RS-P-2B.

The containment recirculation spray system pumps are currently flow tested at least once per 18 months during shutdown on recirculation flow. TS 4.6.2.2.d currently requires these pumps to meet specific acceptance criteria to demonstrate their operability (by having pumps RS-P-1A and RS-P-1B develop ≥ 127 psid at ≥ 2000 gpm and by having pumps RS-P-2A and RS-P-2B develop ≥ 132 psid at ≥ 2000 gpm). The proposed change would require that at the frequency specified in the IST Program, each pump's developed head at the flow test point be greater than or equal to the required developed head as specified in the IST Program and the Containment Integrity Safety Analysis.

3.0 EVALUATION

The proposed change to TS 4.6.2.2.d would delete reference to the specific test acceptance criteria for the recirculation spray system pumps and replace these criteria with reference to the requirements of the IST Program. Future changes in the pumps' minimum operating point could then be made by the licensee in accordance with the provisions of 10 CFR 50.59, without requiring prior NRC staff approval and a license amendment unless an unreviewed safety question is involved. The proposed change is consistent with Beaver Valley Power Station, Unit No. 2 License Amendment No. 68 which was issued on May 3, 1995, and with the guidance of the NRC's Improved Standard Technical Specifications for Westinghouse Plants (NUREG-1431, Revision 0) and is, therefore, acceptable.

The proposed amendment would also change the frequency for demonstrating the operability of the recirculation spray system pumps from once-per-18 months to the frequency specified in the IST Program (each refueling outage). This change is consistent with current NRC staff guidance and requirements, as reflected in the NRC's Improved Standard Technical Specifications (NUREG-1431, Revision 0), and is, therefore, acceptable.

Additionally, the licensee has proposed changes to the Bases for TS 4.6.2.2.d and to the TS Index pages. The proposed changes to the Bases for TS 4.6.2.2.d would define that the term "required developed head" as it is used in TS 4.6.2.2.d means the value that is assumed in the BVPS-1 Containment Integrity Safety Analysis for the containment recirculation spray system pumps' developed head at a specific flow point. Periodic testing of these pumps can then be performed to verify that these pumps are continuing to meet the minimum performance requirements of the Containment Integrity Safety Analysis. Flow and differential head are normal test parameters of centrifugal pump performance and are required by Section XI of the ASME Boiler and Pressure Vessel Code for demonstrating pump performance. The proposed changes to these Bases provide the appropriate definition and therefore, the NRC staff has no objection to these changes. The proposed changes to the Index pages are purely administrative in nature in that they only change page numbers and, therefore, the NRC staff has no objection to these changes either.

4.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Pennsylvania State official was notified of the proposed issuance of the amendment. The State official had no comments.

5.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and changes surveillance requirements. The NRC staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendment involves no significant hazards consideration, and there has been no public comment on such finding (61 FR 10393). Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

6.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: Donald S. Brinkman

Date: May 7, 1996