



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
SUPPORTING AMENDMENT NO. 115 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 October 29, 1986, Duquesne Light Company (the licensee) submitted a license amendment request involving the technical specification (TS) for the Beaver Valley Power Station Unit No. 1. The licensee proposed to update the sections on pressurizer and main steam safety valves to reflect the Standard Technical Specification (STS) requirements and to revise the lift pressure set-point tolerance on these valves from $\pm 1\%$ to $+ 1\%$, $- 3\%$.

Subsequently, in a letter dated June 2, 1987, the licensee submitted a revision to the amendment request to include a requirement to test the pressurizer code safety valve following water discharge from a water solid pressurizer. This revision was to fulfill a commitment identified in the staff Safety Evaluation Report, "Safety/Relief Valves," dated November 10, 1986.

2.0 EVALUATION

The staff review of the licensee's requests was performed in accordance with the guidelines of the Standard Review Plan Section 3.9.6 and the ASME Boiler and Pressure Vessel Code, Section XI. The following proposed changes relating to the technical specifications for the pressurizer safety valves and main steam safety valves were reviewed:

- (1) Add a note in Sections 3.4.2, 3.4.3, and 3.7.1.1 to require resetting the valve to within $\pm 1\%$ of the pressure setpoint following testing.
- (2) Delete reference to the specific ASME Section XI edition and subsection in Section B 3/4.4.3.
- (3) Revise the Surveillance Requirements of Sections 4.4.2, 4.4.3, and 4.7.1 to read "No additional surveillance requirements, other than those required by Specification 4.0.5."
- (4) Add the note "The lift setting pressure shall correspond to ambient conditions of the valve at nominal operating temperature and pressure" to Table 3.7.3 and Sections 3.4.2 and 3.4.3.
- (5) Redesignate Table 4.7-1 as Table 3.7-3.

- (6) Add an additional action statement to pressurizer code safety valve specification 3.4.2 and 3.4.3 to require valve inspection for potential damage following liquid discharge from a water solid pressurizer.
- (7) Change the lift pressure setpoint tolerance from $\pm 1\%$ to $+ 1\%$, $- 3\%$ in Sections 3.4.2, 3.4.3, and 3.7.1.1.

The items (1) through (5), above, are amendments which are consistent with the STS previously approved by the staff and do not violate any applicable staff guidelines.

The item (6) incorporates the valve inspection commitment addressed in the NRC safety evaluation report on safety/relief valves, dated November 10, 1986, and is consistent with the position taken by the staff on this issue. The staff report states that with the inclusion of the technical specification to require inspection of the safety valves following water discharge, the operability of the safety valves used at Beaver Valley Unit 1 has been adequately demonstrated.

In support of item (7), the licensee has provided technical bases for the revised setpoint tolerance of the safety valves. Under current technical specifications, if any valve fails to meet the $\pm 1\%$ set pressure tolerance, an additional sample of valves must be tested in accordance with IWV-3513, Section XI of the ASME Boiler and Pressure Vessel Code. Changing the lift pressure setpoint tolerance to $+ 1\%$, $- 3\%$ would widen the allowable range of setpoint drift, shorten the time needed to perform the tests, and decrease the man-rem exposure incurred during testing and maintenance.

In the design basis analyses, these valves are assumed to open at a pressure that is 1% above the setpoint. If the valve should lift at a lower pressure during a transient, the resultant peak pressure would be bounded by the limiting case that is based on the $+ 1\%$ tolerance. Since the safety valves protect the primary and secondary systems from overpressure, the design basis safety margin corresponding to the current $\pm 1\%$ and the proposed $+ 1\%$, $- 3\%$ is therefore unchanged with the same upper tolerance of $+ 1\%$. The staff has determined that the proposed revision of the safety valve setpoint tolerance would have little safety significance and not alter any of the accident analyses.

Based on the considerations discussed above, the staff concludes that changes identified in Licensee's Request No. 109, dated June 2, 1987 and October 29, 1986, are acceptable.

3.0 ENVIRONMENTAL CONSIDERATION

This 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 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 this amendment involves no significant hazards consideration and there has

been no public comment on such finding. Accordingly, this 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 this amendment.

4.0 CONCLUSION

We have 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, and (2) such activities will be conducted in compliance with the Commission's regulations and the issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Dated: September 8, 1987

Principal Contributors:

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