

UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON D. C. 20655

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION RELATED TO AMENDMENT NO. 35 TO FACILITY OPERATING LICENSE NO. NPF-73

DUQUESNE LIGHT COMPANY

OHIO EDISON COMPANY

THE CLEVELAND ELECTRIC ILLUMINATING COMPANY

THE TOLEDO EDISON COMPANY

BEAVER VALLEY POWER STATION, UNIT NO. 2

DOCKET NO. 50-412

1.0 INTRODUCTION

By letter dated June 21, 1990, Duquesne Light Company (DLC) proposed a revision to the Limiting Condition for Operation applicable to certain containment isolation valves as specified in the Beaver Valley Power Station, Unit 2 (BVPS-2) Technical Specifications (TSs), Section 3/4 6.3. The proposed revision would modify Table 3.6-1, Containment Penetrations, to specify a maximum stroke time of 60 seconds vice 10 seconds as presently specified for valves 2CHS-AOV200A, B, and C associated with Penetration No. 28.

2.0 DISCUSSION AND EVALUATION

On June 4, 1990, during the performance of quarterly slave relay testing, DLC discovered that the stroke time for valves 2CHS-AOV200A, B, and C were greater than the time specified in Table 3.6-1 of the TSs. The valves stroked in approximately 35 seconds instead of 10 seconds or less as specified in Table 3.6-1. These valves are not normally stroke-timed through the slave relay testing initiated from the safeguards test cabinets, instead control room benchboard switches are normally used. When tested using the benchboard switches, the stroke times have been consistently within that specified in Table 3.6-1. The licensee determined that the discrepancy occurs because of differences in circuit configurations and pneumatic valve actuator venting paths.

On June 6, 1990, DLC made a verbal request for a Temporary Waiver of Compliance (TWOC) from the requirement of TS 3.6.3.1. The TWOC was requested because of the inability to demonstrate, per Surveillance Requirement 4.6.3.1.1.a., a maximum stroke time of 10 seconds for valves 2CHS-AOV200A, B, and C. The TWOC was granted verbally on June 6, 1990, and documented by letter dated June 8, 1990. The TWOC was granted subject to the condition that the maximum closure time of the subject valves be demonstrated to be less than 60 seconds. The

TWOC is effective until issuance of this amendment changing the maximum specified stroke time for the subject valves from 10 seconds to less than 60 seconds. Valve stroke timing for these valves is to be verified per Surveillance Requirement (SR) 4.6.3.1.1.b. immediately prior to returning the valve to service following maintenance, repair, or replacement or per SR 4.6.3.1.2.d. at least each 18 months when in refueling or cold shutdown. On September 4, 1990, BVPS-2 entered a refueling outage, and during the outage maintenance was performed on these valves. Therefore, valve stroke timing must be performed on these valves prior to reentering Mode 4 per SR 4.6.3.1.1.b. and 4.6.3.2.d.

Valves 2CHS-A0V200A, B, and C are located in the reactor coolant letdown line downstream of the regenerative heat exchanger in three parallel flow branches. The three branches rejoin to form a single flow path prior to passing through Containment Penetration No. 28. Valve 2CHS-A0V204 is located in the flow path outside of containment. These four valves are designated Containment Isolation Valves (CIVs) and the maximum stroke time of each is specified in Table 3.6-1. A relief path to the Pressurizer Spray and Relief System prevents pressurizing the penetration between the inside and outside CIVs due to thermal expansion of fluid trapped between closed CIVs.

The CIVs inside containment, i.e. 2CHS-AOV200A, B, and C, have a specified 10 second maximum stroke time, and the valve outside containment, i.e. 2CHS-AOV204, has a maximum stroke time of less than 60 seconds. The licensee asserts that the shorter stroke time specified for the inner valves is to assure that the inner valves will be closed before the outer valve thereby averting unnecessary opening of the relief valve in the relief line and the attendant flashing in the regenerative heat exchanger.

According to Section 6.2.4.2 of the Updated Final Safety Analysis Report (UFSAR), the maximum isolation time for any CIV is 60 seconds or less. Table 6.2-60 of the UFSAR indicates that for the normally-open CIVs associated with Penetration No. 28, the closure time for those inside containment is 10 seconds and for those outside containment is 60 seconds. Footnote 24 to Table 6.2-60 indicates the closure times shown are based on maximum limits set by offsite dose calculations. Therefore, for Penetration No. 28, the maximum closure time for any automatic CIV is 60 seconds, and if the stroke times for inside CIVs are no greater than the maximum stroke time for the outside CIV, there is no increase in the dose consequences of any postulated accident.

Based on the above, we find acceptable the proposal to change the maximum stroke time in TS Table 3.6-1, Containment Penetrations, for valves 2CHS-AOV200A, B, and C (Penetration No. 28) to less than 60 seconds.

3.0 ENVIRONMENTAL CONSIDERATION

This amendment changes surveillance requirements. We have 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 staff 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, 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.

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 (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.

Dated: November 13, 1990

Principal Contributor:

Albert W. De Agazio