



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 72 TO FACILITY OPERATING LICENSE NO. NPF-18
COMMONWEALTH EDISON COMPANY
LASALLE COUNTY STATION, UNIT 2
DOCKET NO. 50-374

1.0 INTRODUCTION

By letter dated November 2, 1992, Commonwealth Edison Company (CECo, the licensee) requested an amendment to the LaSalle County Station, Unit 2, technical specifications (TS). The request proposed to amend TS Table 3.6.3-1 to add a footnote that would temporarily waive the requirement for isolation valve 2G33-F040 on the reactor water cleanup (RWCU) return line to have a valid Type C test until the next refueling outage or until the unit goes to cold shutdown for a minimum of 2 weeks, whichever is sooner.

The TS change is required due to the discovery that the licensee's method for performing a Type C test on the 2G33-F040 containment isolation valve was invalid. As a result, the valve was declared inoperable by the licensee and the Action Statement for TS Section 3.6.3 was entered. Action Statement 3.6.3.a.1 requires the licensee to isolate the line with the inoperable valve within 4 hours. Due to the fact that the other isolation valves in the line are check valves, the licensee is unable to isolate the line. This placed them in Action Statement 3.6.3.a.2 which requires a shutdown. An emergency TS amendment is required because insufficient time exists for the Commission's usual 30-day notice to prevent an unnecessary plant shutdown.

2.0 DISCUSSION

For LaSalle, automatic isolation for the main feedwater and the RWCU return lines is accomplished by two check valves (2B21-F010 and 2B21-F032) in series on the main feedwater line. Long-term leakage protection is provided by remote manual isolation valves 2B21-F065 for the feedwater and 2G33-F040 for the RWCU return line. The RWCU return line to the feedwater system connects to the main feedwater piping between the outboard check valve 2B21-F032 and the remote manual isolation valve 2B21-F065. The configuration of the feedwater and RWCU systems for LaSalle County Station is shown in Figure 1 of the licensee's November 2, 1992, amendment request.

The RWCU return line also has a check valve (2G33-F039) which is located upstream of the 2G33-F040 valve. The check valve is located between the 2G33-F040 valve and the vent path used in determining its leak rate during Type C testing. Because of this configuration, the licensee was actually testing the combination of the 2G33-F040 and the 2G33-F039 valves rather than

testing the 2G33-F040 valve by itself. The leak rate for the 2G33-F040 valve by itself is unknown.

TS Table 3.6.3-1 contains the list of containment isolation valves for the licensee. The licensee has requested an emergency TS change which would add the following footnote to valve 2G33-F040 in TS Table 3.6.3-1:

For the remainder of Cycle 5, or until the first outage in which the unit is in Cold Shutdown for two weeks or greater duration, the Type C test is not required to be current for the 2G33-F040 valve and its leakage is not required to be included in the total Type B & C leakage specified by Specification 3.6.1.2.b.

This would allow Unit 2 to continue operation until the earliest opportunity to perform a valid Type C test on the 2G33-F040 valve.

In their November 2, 1992, submittal, the licensee presents three reasons for justifying this emergency TS amendment and allowing continued operation in their current condition. First, the licensee notes that the first isolation barrier is feedwater check valves 2B21-F010 and 2B21-F032 which were acceptably leak rate tested last refueling outage. These valves also provide the automatic isolation function for both the main feedwater and the RWCU return lines. Dual check valves installed on the line allow the containment leakage criteria of 10 CFR Part 50, Appendix J, to be met in the event of a single failure. Second, the leak rate for the combination of the RWCU isolation valve (2G33-F040) and the upstream check valve (2G33-G039) have been demonstrated to be in allowable limits for the RWCU line. The licensee has committed not performing any maintenance or surveillance work on the check valve 2G33-G039 without additional testing to ensure that 2G33-F040 is operable. Finally, the licensee indicated that since this valve does not isolate automatically, no credit is taken for the Type A test. Thus, the leakage for valve 2G33-F040 is not a factor in the acceptability of the Containment Integrated Leak Rate Test (CILRT).

3.0 EVALUATION

The staff has reviewed the licensee's request and has found that temporarily operating the plant with an invalid Type C test for the 2G33-F040 valve does not: (1) provide a significant reduction in safety margin, (2) increase the probability or consequences of an accident previously evaluated, or (3) create the possibility of a new or different kind of accident from any accident previously evaluated. The staff finding is based on the fact that the automatic isolation function provided by the feedwater check valves 2B21-F010 and 2B21-F032 is not degraded by the lack of a valid Type C test on the 2G33-F040 valve and that these valves were demonstrated to be acceptably leaktight during the last refueling outage. Also, the long-term isolation function of the RWCU return line for the 2G33-F040 valve can still be acceptably provided by the combination of that valve with the 2G33-F039 check valve. In addition, since no credit is taken for the 2G33-F040 valve in the CILRT, the invalid Type C test does not affect the acceptability of the

containment integrity. Based on the above, the staff finds the licensee's proposed TS amendment to be acceptable.

4.0 EMERGENCY CIRCUMSTANCES

This TS amendment is being treated as an emergency TS amendment because the licensee would have to unnecessarily shut down the plant without the amendment. The licensee does not believe that they could have avoided this emergency situation because the validity of their method for Type C testing the 2G33-F040 valve was only called into question recently by the resident inspector. The licensee stated that the configuration being used to test the 2G33-F040 valve was believed to be acceptable because it was thought check valve 2G33-F039 would not completely seal, thus providing a vent path for a valid Appendix J Type C test. Furthermore, based on the fact the staff had not questioned the validity of the test during previous Appendix J inspections, CECO believed the test method was acceptable. Thus, the staff concludes as required by 10 CFR Part 50.91(a)(5) that the licensee could not have avoided this emergency situation. Accordingly, the Commission has determined that there are emergency circumstances warranting prompt approval by the Commission.

5.0 FINAL NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION

The Commission has provided standards for determining whether a significant hazards consideration exists (10 CFR 50.92(c)). A proposed amendment to an operating license for a facility involves no significant hazards consideration if operation of the facility in accordance with the proposed amendment would not: (1) involve a significant increase in the probability or consequences of an accident previously evaluated; or (2) create the possibility of a new or different kind of accident from an accident previously evaluated; or (3) involve a significant reduction in a margin of safety.

- The staff has reviewed the licensee's submittal and found that the probability of an accident previously evaluated is not increased because the accident initiators for the feedwater or RWCU return line breaks discussed in the Updated Final Safety Analysis Report are not affected by potential leakage through the 2G33-F040. In addition, the consequences of an accident previously evaluated is not significantly increased because the feedwater line isolation check valves still provide automatic isolation and form the leakage barrier which is the boundary for the CILRT (Type A test). Also, the RWCU return line forms a tested leakage barrier for a long-term leakage control. Therefore, operation of the facility in accordance with the proposed amendment does not involve a significant increase in the probability or consequences of an accident previously evaluated.
- The staff has also found that the use of the 2G33-F040 as a long-term isolation boundary following a RWCU return line break was previously evaluated and the nonconservative Type C test method does not create a new or different accident because the RWCU line forms the long-term isolation boundary utilizing both the 2G33-F040 and the 2G33-F039 check

valve. The licensee's Type C test results showed the leak rate for the combination of the 2G33-F040 and the 2G33-F039 to be acceptable. Therefore, operation of the facility in accordance with the proposed amendment does not create the possibility of a new or different kind of accident from any accident previously evaluated.

- In addition, the staff has found that operation of the facility in accordance with the proposed amendment does not involve a significant reduction in the margin of safety since the combined leakage of the 2G33-F040 and the 2G33-F039 check valve are within allowable limits for the RWCU return line. The feedwater isolation check valve leakages are within limits for the feedwater lines and fulfill the automatic isolation function for the feedwater containment penetrations. Therefore, there is no significant reduction in the margin of safety.

Based on the foregoing, the Commission has concluded that the standards of 10 CFR 50.92 are satisfied. Therefore, the Commission has made a final determination that the proposed amendment involves no significant hazards considerations.

6.0 STATE CONSULTATION

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

7.0 ENVIRONMENTAL CONSIDERATION

This amendment changes a requirement with respect to the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The NRC staff has determined that this 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 made a final no significant hazards consideration finding with respect to this amendment. 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.

8.0 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 this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor Robert B. Elliott

Date: November 20, 1992