



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 82 TO FACILITY OPERATING LICENSE NO. NPF-11 AND
AMENDMENT NO. 66 TO FACILITY OPERATING LICENSE NO. NPF-18

COMMONWEALTH EDISON COMPANY

LASALLE COUNTY STATION, UNITS 1 AND 2

DOCKET NOS. 50-373 AND 50-374

1.0 INTRODUCTION

By letter dated June 12, 1991, Commonwealth Edison Company (CECo, the licensee) submitted a Technical Specification (TS) amendment request to change the TS specific gravity limits for the engineered safety features (ESF) Division III 125 volt DC batteries for the LaSalle County Station, Units 1 and 2. The request is due to the station's plan to replace their existing Division III batteries during each unit's next refueling outage with similar batteries. The replacement batteries will be Lead-Calcium type and are built by the same manufacturer as the existing batteries. However, for the new batteries, the manufacturer recommends maintaining a different electrolyte specific gravity than is currently maintained for the existing Division III batteries. The reason for the battery replacement is the station is having difficulty obtaining replacement cells for the existing batteries because the manufacturer is no longer making them.

2.0 DISCUSSION

CECo's submittal proposes to amend the specific gravity requirements listed in Table 4.8.2.3.2-1 for each unit. The table provides the Category A (weekly) and Category B (quarterly) surveillance requirements for demonstrating operability of all three divisions of batteries. Category A surveillances are performed on designated pilot cells only. Category B surveillances are performed on all individual cells. The parameters which are monitored during the weekly and quarterly surveillance are electrolyte level, float voltage, and specific gravity of the battery electrolyte. Verification of these battery characteristics is performed in order to ensure that the batteries are operable and capable of performing their safety function. In addition, the table has an allowable value column which allows operation with a cell's parameter outside the normal Category A and Category B limits as long as the cell is within the allowable values and the parameter is restored within normal limits within 7 days.

The new Division III batteries have a nominal specific gravity of 1.215 at 77 degrees Fahrenheit versus the existing batteries which have a nominal specific gravity of 1.210 at 77 degrees Fahrenheit. The existing Division I and Division II batteries have a nominal specific gravity at 1.215 at 77 degrees Fahrenheit which is the same as the new Division III batteries.

The current battery specific gravity surveillance requirements in Table 4.8.2.3.2-1 are as follows:

1. Divisions I and II

Category A - each designated pilot cell shall have a specific gravity greater than or equal to 1.200 or the battery float charge current shall be less than 2 amperes.

Category B - each connected cell shall have a specific gravity greater than or equal to 1.195 and the average of all connected cells shall be greater than 1.205.

Allowable - no connected cell can have a specific gravity more than .020 below the average of all connected cells and either the average of all connected cells shall be greater than or equal to 1.195 or the battery float charge current shall be less than 2 amperes.

2. Division III

Category A - each designated pilot cell shall have a specific gravity greater than or equal to 1.195 or the battery float charge current shall be less than 2 amperes.

Category B - each connected cell shall have a specific gravity greater than or equal to 1.190 and the average of all connected cells shall be greater than 1.200.

Allowable - no connected cell can have a specific gravity more than .020 below the average of all connected cells and either the average of all connected cells shall be greater than or equal to 1.190 or the battery float charge current shall be less than 2 amperes.

The licensee's proposal is to remove the separate requirements for the Division III batteries and make the requirements for the Division I and Division II batteries applicable to all three divisions.

3.0 EVALUATION

The nominal specific gravity for the new batteries being installed by the licensee is 1.215 at 77 degrees Fahrenheit versus the existing batteries which have a nominal specific gravity of 1.210 at 77 degrees Fahrenheit. This means that the current specific gravity values specified in Table 4.8.2.3.2-1 for Category A limits, Category B limits, and for the allowable values for each connected cell are non-conservative since they are lower than will be required for maintaining an adequate charge in the new replacement batteries. As shown above, the Division I and Division II batteries have identical requirements and the Division III batteries have a separate set of requirements. The new replacement Division III batteries have the same nominal specific gravity ratings as the current Division I and Division II batteries. Based on this, the staff finds the licensee's proposal to remove the separate requirements for the Division III batteries and make the requirements the same for all three divisions to be acceptable.

4.0 STATE CONSULTATION

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

5.0 ENVIRONMENTAL CONSIDERATION

The amendments change 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 the amendments involve 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 amendments involve no significant hazards consideration, and there has been no public comment on such finding (56 FR 31431). Accordingly, the amendments meet 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 amendments.

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

Principal Contributor: R. Elliott

Dated: March 31, 1992