



Commonwealth Edison
1400 Opus Place
Downers Grove, Illinois 60515

10 CFR 50.90

June 12, 1991

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, D.C. 20555

SUBJECT: LaSalle County Station Units 1 and 2 Application for
Amendment to Facility Operating Licenses NPF-11 and NPF-18,
Appendix A, Technical Specifications; Division III 125
Volt DC Battery Specific Gravity Requirements.
NRC Docket Nos. 50-373 and 50-374

Gentlemen:

Pursuant to 10 CFR 50.90, Commonwealth Edison (CECo) proposes to amend Appendix A, Technical Specifications, of Facility Operating Licenses NPF-11 and NPF-18. The proposed amendment requests a change to the engineered safety feature Division III 125 Volt DC battery specific gravity requirements. This change will update the Technical Specifications to reflect the manufacturer's recommendations for nominal specific gravity values for the replacement batteries to be installed under the LaSalle Station modification program. It is requested that the amendments be made effective prior to the startup of each Unit at the end of the refuel outage in which the replacement batteries are installed (L1R05 and L2R04). These outages are currently scheduled to begin in January 1992 for L2R04 and October 1992 for L1R05.

This proposed amendment request is subdivided as follows:

1. Attachment A gives a description and safety analysis of the proposed changes in this amendment.
2. Attachment B includes the marked-up Technical Specifications pages with the requested changes indicated.
3. Attachment C describes CECo's evaluation performed in accordance with 10 CFR 50.92 (c), which confirms that no significant hazards consideration is involved.
4. Attachment D provides the Environmental Assessment.

This proposed amendment has been reviewed and approved by CECo On-Site and Off-Site Review in accordance with Commonwealth Edison procedures.

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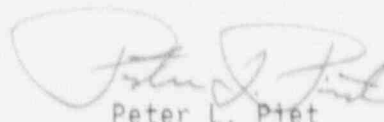
June 12, 1991

To the best of my knowledge and belief, the statements contained above are true and correct. In some respect these statements are not based on my personal knowledge, but obtained information furnished by other Commonwealth Edison employees, contractor employees, and consultants. Such information has been reviewed in accordance with company practice, and I believe it to be reliable.

Commonwealth Edison is notifying the State of Illinois of this application for amendment by transmitting a copy of this letter and its attachments to the designated state official.

Please direct any questions you may have concerning this submittal to this office.

Very truly yours,



Peter L. Piet
Nuclear Licensing Administrator

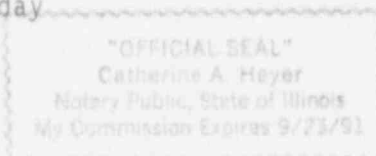
Attachments:

- A. Description of Safety Analysis of the Proposed Changes
- B. Marked-Up Technical Specification Pages
- C. Evaluation of Significant Hazards Considerations
- D. Environmental Assessment

cc: A.B. Davis - Regional Administrator, RIII
Senior Resident Inspector - LSCS
B.L. Siegel - NRR, Project Manager
Office of Nuclear Facility Safety - IDNS

PLP/cag

Signed before me on this 12th day
of June, 1991,
by Catherine A. Hoyer
Notary Public



ATTACHMENT A

DESCRIPTION AND SAFETY ANALYSIS OF PROPOSED CHANGES TO APPENDIX A, TECHNICAL SPECIFICATIONS OF FACILITY OPERATING LICENSES NPF-11 AND NPF-18

BACKGROUND

The purpose of this amendment request is to modify the engineered safety feature (ESF) Division III 125 Volt DC battery specific gravity requirements. This change will update the Technical Specifications to reflect the manufacturer's recommendations for nominal specific gravity values for the replacement batteries to be installed under the LaSalle Station modification program.

The DC distribution system and the batteries are designed to provide control power for both normal and emergency operation of plant equipment and to provide power for automatic operation of the ESF protection systems during abnormal and accident conditions (UFSAR 8.3.2.1). The Technical Specification limits for battery specific gravity are based upon the manufacturer's nominal full charge specific gravity rating for a particular battery type. The replacement batteries are of a different type and are rated with a higher nominal full charge specific gravity value than the currently installed batteries. Increasing the Technical Specification specific gravity limits for the Division III batteries will help to ensure that they are maintained in an operable condition capable of meeting their design functions. This amendment does not affect the initial assumptions for any accident evaluated in the UFSAR.

The bases for Technical Specification 3/4.8.2 provide the criteria for establishing the battery specific gravity limits based on the manufacturer's ratings. The limits currently provided in the Technical Specifications for the Division III batteries are non-conservative for the replacement batteries. Therefore, the Technical Specification specific gravity limits for the Division III batteries must be increased in order to maintain the current margin of safety for the new batteries.

DESCRIPTION OF THE PROPOSED CHANGES

The replacement batteries will have a nominal specific gravity value of 1.215 @ 77°F instead of the nominal value of 1.210 @ 77°F for the existing batteries. This difference will require an amendment to Table 4.8.2.3.2-1 "Battery Surveillance Requirements" for the Division III battery specific gravity limits.

Technical Specification 3/4.8.2 for Unit 1 and Unit 2 provides the limiting conditions for operation and Surveillance Requirements for the plant 125 volt DC electrical distribution system. Each Unit is equipped with three 125 volt DC ESF electrical divisions. The DC distribution system and the batteries are designed to provide control power during normal and emergency operation of the plant equipment and to provide power for automatic operation of the ESF protection systems during abnormal and accident conditions (UFSAR Section 8.3.2.1). The ESF Division III 125 volt DC distribution system is required for operation of the high pressure core spray (HPCS) system only. The Division III DC distribution system is used to provide power for: 1) HPCS diesel generator field flashing, 2) control logic, and 3) the control and switching functions of the associated divisional 4.16 kV circuit breakers.

ATTACHMENT A (continued)

Technical Specifications 4.8.2.3.2.a.1 and 4.8.2.3.2.b.1 establish requirements for performing weekly (Category A) and quarterly (Category B) surveillance tests in accordance with Table 4.8.2.3.2-1 "Battery Surveillance Requirements." Table 4.8.2.3.2-1 provides a listing of the parameters to be measured along with the appropriate acceptance criteria. Table 4.8.2.3.2-1 specifies the normal limits for each designated pilot cell (Category A) and the normal and allowable limits for each connected cell (Category B).

The limits for specific gravity are based upon the battery manufacturer's specifications for nominal full charge specific gravity (refer to Table 1). The limits have been set as follows:

- The Category A limit is established at a value 0.015 below the nominal value or when the battery charging current is less than 2 amperes when on a float charge.
- The normal Category B limit for each connected cell has been set for a value 0.020 below the nominal value.
- The normal Category B limit for the average of all connected cells is set a value 0.010 below the nominal value.
- The allowable limit for any connected cell is established at a value not more than 0.020 below the average value for all connected cells.
- The allowable limit for the average of all connected cells is set for a value of not more than 0.020 below the nominal value or when the battery charging current is less than 2 amperes when on a float charge.

Compliance with these limitations will ensure that the batteries are operable and capable of meeting their design functions.

Under certain conditions, stratification of the battery electrolyte can lead to erroneous specific gravity readings. An alternative acceptance criterion is provided for the Category A designated pilot cell specific gravity limit and the Category B allowable value for the average of all connected cells when accurate specific gravity readings cannot be obtained. This criterion indicates that the battery conditions are normal when the battery charging current is less than 2 amperes when on a float charge. This low value for the charging current is characteristic of a fully charged battery with adequate capacity.

ATTACHMENT A (continued)

Table 4.8.2.3.2-1 currently provides specific gravity limits for the Division I and Division II batteries. In addition, a separate specific gravity limit is provided in Table 4.8.2.3.2-1 for the Division III battery. The nominal specific gravity rating for the Division III replacement battery is the same as the current rating for the Division I and Division II batteries. Therefore, it is necessary to amend the Technical Specifications by eliminating the separate values for the Division III battery. The specific changes are noted in Attachment B.

SUMMARY

This amendment does not bring about any changes to the facility or to the operation of the facility as described in the UFSAR. The existing Division III batteries have different specific gravity requirements as compared to the new batteries. Therefore, the amendments should be made effective prior to the startup of each Unit at the end of the refuel outage in which the replacement batteries are installed. The Division III battery modifications are currently scheduled for completion during the next refuel outage for each unit. L2R04 is scheduled to begin in January 1992 and L1R05 is scheduled to begin in October 1992.

ATTACHMENT A (continued)

TABLE 1

CATEGORY A		CATEGORY B	
PARAMETER	Limit for Each Designated Pilot Cell	Limit for Each Connected Cell	Allowable Value For Each Connected Cell
Specific Gravity	0.015 below full charge specific gravity or when float charge current is less than 2 amperes	0.020 below full charge specific gravity	Not more than 0.020 below the average of all connected cells
		Not more than 0.010 below the full charge specific gravity for all connected cells	Not more than 0.020 below the average of all connected cells or when float charge current is less than 2 amperes

ATTACHMENT B

PROPOSED CHANGES TO APPENDIX A,
TECHNICAL SPECIFICATIONS OF FACILITY
OPERATING LICENSES NPF-11 AND NPF-18

REVISED PAGES

UNIT ONE (NPF-11)

3/4 8-18

UNIT TWO (NPF-18)

3/4 8-18