November 23, 1993

Docket Nos. 50-373
and 50-374

Mr. D. L. Farrar
Manager, Nuclear Regulatory Services
Commonwealth Edison Company
Executive Towers West III, Suite 500
1400 OPUS Place
Downers Grove, Illinois 60515

DISTRIBUTION:
NRC & Local PDRs
J. Roe
J. Dyer
C. Moore
ACRS (10)
OC/LFDCB
D. Hagan
Docket Files
PDIII-2 r/f
J. Zwolinski
A. Gody, Jr.
OGC
OPA
B. Clayton RIII

Dear Mr. Farrar:

SUBJECT: LICENSE AMENDMENTS RELATED TO NRC APPROVAL OF A REVISION TO THE LASALLE COUNTY STATION, UNITS 1 AND 2, UPDATED FINAL SAFETY ANALYSIS REPORT (TAC NOS. M87720 AND M87721)

The Commission has forwarded the enclosed "Notice of Consideration of Issuance of Amendments to Facility Operating Licenses, Proposed No Significant Hazards Consideration Determination and Opportunity for a Hearing" to the Office of the Federal Register for publication.

The amendments would approve a revision to the LaSalle County Station, Units 1 and 2, Updated Final Safety Analysis Report (UFSAR), Section 11.5.2.1.4, which specifies that currently, operator action is required to trip the mechanical vacuum pump upon receipt of a main steam line high radiation alarm rather than the automatic trip currently described in the UFSAR. NRC approval is required because this existing condition, contrary to that described in the UFSAR and the NRC's Safety Evaluation Report (SER) related to the operation of LaSalle County Station (NUREG-0519), involves an unreviewed safety question.

Sincerely,

Original signed by:

Anthony T. Gody, Jr., Project Manager
Project Directorate III-2
Division of Reactor Projects - III/IV/V
Office of Nuclear Reactor Regulation

060077

Enclosure:
Notice

cc w/enclosure:
See next page

NRC FILE CENTER COPY

OFC	LA:PDIII-2	PM:PDIII-2	D:PDIII-2			
NAME	CMOORE	AGODY	JDYER			
DATE	11/23/93	11/23/93	11/23/93	/ /93	/ /93	/ /93
COPY	YES/NO	YES/NO	YES/NO	YES/NO	YES/NO	YES/NO

cc:

Phillip P. Steptoe, Esquire
Sidley and Austin
One First National Plaza
Chicago, Illinois 60603

Assistant Attorney General
100 West Randolph Street
Suite 12
Chicago, Illinois 60601

Resident Inspector/LaSalle, NPS
U. S. Nuclear Regulatory Commission
Rural Route No. 1
P. O. Box 224
Marseilles, Illinois 61341

Chairman
LaSalle County Board of Supervisors
LaSalle County Courthouse
Ottawa, Illinois 61350

Attorney General
500 South 2nd Street
Springfield, Illinois 62701

Chairman
Illinois Commerce Commission
Leland Building
527 East Capitol Avenue
Springfield, Illinois 62706

Illinois Department of Nuclear Safety
Office of Nuclear Facility Safety
1035 Outer Park Drive
Springfield, Illinois 62704

Regional Administrator, Region III
U. S. Nuclear Regulatory Commission
799 Roosevelt Road, Bldg. #4
Glen Ellyn, Illinois 60137

Robert Neuman
Office of Public Counsel
State of Illinois Center
100 W. Randolph
Suite 11-300
Chicago, Illinois 60601

Robert Cushing
Chief, Public Utilities Division
Illinois Attorney General's Office
100 West Randolph Street
Chicago, Illinois 60601

Michael I. Miller, Esquire
Sidley and Austin
One First National Plaza
Chicago, Illinois 60690

LaSalle Station Manager
LaSalle County Station
Rural Route 1
P. O. Box 220
Marseilles, Illinois 61341

7590-01

UNITED STATES NUCLEAR REGULATORY COMMISSION

COMMONWEALTH EDISON COMPANY

DOCKET NOS. 50-373 AND 50-374

NOTICE OF CONSIDERATION OF ISSUANCE OF AMENDMENTS TO FACILITY OPERATING LICENSES, PROPOSED NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION, AND OPPORTUNITY FOR A HEARING

The U.S. Nuclear Regulatory Commission (the Commission) is considering issuance of amendments to Facility Operating License Nos. NPF-11 and NPF-18 issued to Commonwealth Edison Company (the licensee) for operation of the LaSalle County Station, Units 1 and 2, located in LaSalle County, Illinois.

The proposed amendments would approve a revision to the LaSalle County Station, Units 1 and 2, Updated Final Safety Analysis Report (UFSAR), Section 11.5.2.1.4, which specifies that currently, operator action is required to trip the mechanical vacuum pump upon receipt of a main steam line high radiation alarm rather than the automatic trip currently described in the UFSAR. NRC approval is required because this existing condition, contrary to that described in the UFSAR and the NRC's Safety Evaluation Report (SER) related to the operation of LaSalle County Station (NUREG-0519), involves an unreviewed safety question.

Before issuance of the proposed license amendments, the Commission will have made findings required by the Atomic Energy Act of 1954, as amended (the Act) and the Commission's regulations.

The Commission has made a proposed determination that the amendments requested involve no significant hazards consideration. Under the Commission's regulations in 10 CFR 50.92, this means that operation of the facility in accordance with the proposed amendments 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 any accident previously evaluated; or (3) involve a significant reduction in a margin of safety. As required by 10 CFR 50.91(a), the licensee has provided its analysis of the issue of no significant hazards consideration, which is presented below:

1) Involve a significant increase in the probability or consequences of an accident previously evaluated because:

The lack of an automatic trip and isolation of the LaSalle Unit 1 and 2 mechanical vacuum pumps does not change the accident initiators for a design basis control rod drop accident or the inventory of fuel fission products available for release during this accident. Therefore, the probability of the design basis control rod drop accident is not changed.

The lack of an automatic trip and isolation of the LaSalle Unit 1 and 2 mechanical vacuum pumps does not significantly increase the consequences of the design basis control rod drop accident provided that the mechanical vacuum pump is tripped within 15 minutes of receiving the main steam high radiation trip alarms. Fifteen minutes for this operator action is reasonable time to respond to alarms based on licensed operator training, including simulator training. The trip is accomplished with a hand switch located on the Main Control Room front panels. A Human Factors Task Analysis has been performed by Commonwealth Edison and found acceptable assessing the actions to be performed by the control room operator. Also, the time that the mechanical vacuum pump operates during reactor startup, approximately 8 hours, does not affect the probability of the design basis control rod drop accident.

UFSAR [Updated Final Safety Analysis Report] section 15.4.9 states that a rod drop does not exceed the 280 cal/gm design limit and failure of fuel cannot result naturally from a control rod drop accident. This determination was based on the following input parameters and initial conditions:

At the time of the control rod drop accident the core is assumed to be at a cycle point which results in the highest control rod worth. The core is also assumed to contain no xenon, to be in a hot-startup condition, and to have the control rods in sequence at a 50% rod density. The assumption to remove xenon, which competes well for neutron absorptions, increases the fractional absorptions, or worth of the control rods. The 50% control rod

density assumption, ("black and white" rod pattern), which nominally occurs at the hot-startup condition, ensures that withdrawal on the next rod results in the maximum increment of reactivity.

The control rod drop accident analysis is performed as described in:

General Electric [GE] document NEDE-24011-P-A-10-US, "General Electric Standard Application for Reactor Fuel (GESTAR-II), Supplement for United States, dated March 1991.

If the worth of any control rod is determined to be greater than 1% $\Delta\kappa/\kappa$, a cycle specific control rod drop analysis is performed in accordance with:

Commonwealth Edison Co. Nuclear Fuel Services Report, NFSR-0075, Rev. 0, "Control Rod Sequence Simplification," December, 1989.

The analysis for each unit's current cycle performed per NFSR-0075 verifies that heat generated during a control rod drop accident is less than the 280 cal/gm design limit.

The assumptions of the Control Rod Drop Accident [CRDA] analysis are conservative with respect to the realistic or actual values or practice. A comparison of the conservative assumptions versus the more realistic case are as follows (even though not taken credit for in either the original or new analyses that have been performed):

a. GE uses 10 rod groups for the analysis, LaSalle subdivides these into 12 groups. The smaller groups reduce radial peaking and incremental rod worths, resulting in lower fuel enthalpies.

b. GE uses an adiabatic model to calculate the peak fuel enthalpy, Brookhaven National Laboratory (BNL) has analyzed for the NRC the CRDA using appropriate thermal-hydraulic feedback. BNL results show the peak fuel enthalpy well below the 150 cal/gm for a 1.5% $\Delta\kappa$ rod worth compared to GE's analysis of 280 cal/gm for a 1.42% $\Delta\kappa$ rod worth.

Based on the above, there is not a significant increase in the probability or consequences of the design basis control rod drop accident.

2) Create the possibility of a new or different kind of accident from any accident previously evaluated because:

This change specifically affects the design basis control rod drop accident, and is the only low power event that involves release of fission products to the main condenser. The only difference between the accepted analysis and the new analysis is the rate of release from the main condenser and a ground level release (original analysis) versus an elevated (from the station vent stack) release, for the new analysis. Therefore, the change does not create the possibility of a new or different kind of accident.

3) Involve a significant reduction in the margin of safety because:

The margin of safety that is affected by this change involves the radiological consequences of the design basis control rod drop accident. This margin of safety is based on the Standard Review Plan, section 15.4.9, which states that the calculated whole-body and thyroid doses at the exclusion area boundaries (EAB) and at the low population zone (LPZ) boundaries are well within the exposure guideline values in 10 CFR part 100, section 11, if the doses are less than 25% of the 10 CFR Part 100 exposure guideline values or 75 rem for the thyroid and 6 rem for whole-body doses. If the mechanical vacuum pump is manually tripped in less than or equal to 15 minutes after the receipt of the main steam line high radiation trip alarm, the analysis shows that the radiological consequences of the design basis control rod drop accident are less than 25% of the 10 CFR Part 100 exposure guideline values.

Guidance has been provided in "Final Procedures and Standards on No Significant Hazards Considerations," Final Rule, 51 FR 7744, for the application of standards to license change requests for determination of the existence of significant hazards considerations. This document provides examples of amendments which are and are not considered likely to involve significant hazards considerations. These proposed amendments most closely fit the example of a change which may [either result in some increase to the probability or consequences of a previously] analyzed accident or may reduce in some way a safety margin, but where the results are clearly within all acceptable criteria with respect to the system or component specified in the Standard Review Plan section 15.4.9.

The NRC staff has reviewed the licensee's analysis and, based on this review, it appears that the three standards of 10 CFR 50.92(c) are satisfied. Therefore, the NRC staff proposes to determine that the amendments requested involve no significant hazards consideration.

The Commission is seeking public comments on this proposed determination. Any comments received within 30 days after the date of

publication of this notice will be considered in making any final determination.

Normally, the Commission will not issue the amendments until the expiration of the 30-day notice period. However, should circumstances change during the notice period such that failure to act in a timely way would result, for example, in derating or shutdown of the facility, the Commission may issue the license amendments before the expiration of the 30-day notice period, provided that its final determination is that the amendments involve no significant hazards consideration. The final determination will consider all public and State comments received. Should the Commission take this action, it will publish in the FEDERAL REGISTER a notice of issuance and provide for opportunity for a hearing after issuance. The Commission expects that the need to take this action will occur very infrequently.

Written comments may be submitted by mail to the Rules Review and Directives Branch, Division of Freedom of Information and Publications Services, Office of Administration, U.S. Nuclear Regulatory Commission, Washington, DC 20555, and should cite the publication date and page number of this FEDERAL REGISTER notice. Written comments may also be delivered to Room P-223, Phillips Building, 7920 Norfolk Avenue, Bethesda, Maryland, from 7:30 a.m. to 4:15 p.m. Federal workdays. Copies of written comments received may be examined at the NRC Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC 20555.

The filing of requests for hearing and petitions for leave to intervene is discussed below.

By January 3, 1994 , the licensee may file a request for a hearing with respect to issuance of the amendments to the subject facility operating

licenses and any person whose interest may be affected by this proceeding and who wishes to participate as a party in the proceeding must file a written request for a hearing and a petition for leave to intervene. Requests for a hearing and a petition for leave to intervene shall be filed in accordance with the Commission's "Rules of Practice for Domestic Licensing Proceedings" in 10 CFR Part 2. Interested persons should consult a current copy of 10 CFR 2.714 which is available at the Commission's Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC 20555 and at the local public document room located at the Public Library of Illinois Valley Community College, Rural Route No. 1, Oglesby, Illinois 61348. If a request for a hearing or petition for leave to intervene is filed by the above date, the Commission or an Atomic Safety and Licensing Board, designated by the Commission or by the Chairman of the Atomic Safety and Licensing Board Panel, will rule on the request and/or petition; and the Secretary or the designated Atomic Safety and Licensing Board will issue a notice of hearing or an appropriate order.

As required by 10 CFR 2.714, a petition for leave to intervene shall set forth with particularity the interest of the petitioner in the proceeding, and how that interest may be affected by the results of the proceeding. The petition should specifically explain the reasons why intervention should be permitted with particular reference to the following factors: (1) the nature of the petitioner's right under the Act to be made party to the proceeding; (2) the nature and extent of the petitioner's property, financial, or other interest in the proceeding; and (3) the possible effect of any order which may be entered in the proceeding on the petitioner's interest. The petition should also identify the specific aspect(s) of the subject matter of the

proceeding as to which petitioner wishes to intervene. Any person who has filed a petition for leave to intervene or who has been admitted as a party may amend the petition without requesting leave of the Board up to 15 days prior to the first prehearing conference scheduled in the proceeding, but such an amended petition must satisfy the specificity requirements described above.

Not later than 15 days prior to the first prehearing conference scheduled in the proceeding, a petitioner shall file a supplement to the petition to intervene which must include a list of the contentions which are sought to be litigated in the matter. Each contention must consist of a specific statement of the issue of law or fact to be raised or controverted. In addition, the petitioner shall provide a brief explanation of the bases of the contention and a concise statement of the alleged facts or expert opinion which support the contention and on which the petitioner intends to rely in proving the contention at the hearing. The petitioner must also provide references to those specific sources and documents of which the petitioner is aware and on which the petitioner intends to rely to establish those facts or expert opinion. Petitioner must provide sufficient information to show that a genuine dispute exists with the applicant on a material issue of law or fact. Contentions shall be limited to matters within the scope of the amendments under consideration. The contention must be one which, if proven, would entitle the petitioner to relief. A petitioner who fails to file such a supplement which satisfies these requirements with respect to at least one contention will not be permitted to participate as a party.

Those permitted to intervene become parties to the proceeding, subject to any limitations in the order granting leave to intervene, and have the

opportunity to participate fully in the conduct of the hearing, including the opportunity to present evidence and cross-examine witnesses.

If a hearing is requested, the Commission will make a final determination on the issue of no significant hazards consideration. The final determination will serve to decide when the hearing is held.

If the final determination is that the amendments requested involve no significant hazards consideration, the Commission may issue the amendments and make it immediately effective, notwithstanding the request for a hearing. Any hearing held would take place after issuance of the amendments.

If the final determination is that the amendments requested involve a significant hazards consideration, any hearing held would take place before the issuance of any amendments.

A request for a hearing or a petition for leave to intervene must be filed with the Secretary of the Commission, U.S. Nuclear Regulatory Commission, Washington, DC 20555, Attention: Docketing and Services Branch, or may be delivered to the Commission's Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC 20555, by the above date. Where petitions are filed during the last 10 days of the notice period, it is requested that the petitioner promptly so inform the Commission by a toll-free telephone call to Western Union at 1-(800) 248-5100 (in Missouri 1-(800) 342-6700). The Western Union operator should be given Datagram Identification Number N1023 and the following message addressed to James E. Dyer: petitioner's name and telephone number, date petition was mailed, plant name, and publication date and page number of this FEDERAL REGISTER notice. A copy of the petition should also be sent to the Office of the General Counsel, U.S. Nuclear Regulatory Commission, Washington, DC 20555, and to Michael I. Miller,

Esquire; Sidley and Austin, One First National Plaza, Chicago, Illinois 60690, attorney for the licensee.

Nontimely filings of petitions for leave to intervene, amended petitions, supplemental petitions and/or requests for hearing will not be entertained absent a determination by the Commission, the presiding officer or the presiding Atomic Safety and Licensing Board that the petition and/or request should be granted based upon a balancing of the factors specified in 10 CFR 2.714(a)(1)(i)-(v) and 2.714(d).

For further details with respect to this action, see the application for amendments dated September 10, 1993 as supplemented on November 17, 1993, which is available for public inspection at the Commission's Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC 20555 and at the local public document room located at the Public Library of Illinois Valley Community College, Rural Route No. 1, Oglesby, Illinois 61348.

Dated at Rockville, Maryland, this 23rd day of November 1993.

FOR THE NUCLEAR REGULATORY COMMISSION

Anthony T. Gody, Jr., Project Manager
Project Directorate III-2
Division of Reactor Projects - III/IV/V
Office of Nuclear Reactor Regulation