

October 10, 2000

Mr. Oliver D. Kingsley, President
Nuclear Generation Group
Commonwealth Edison Company
Executive Towers West III
1400 Opus Place, Suite 500
Downers Grove, IL 60515

SUBJECT: LASALLE - ISSUANCE OF AMENDMENTS (TAC NOS. MA9074 AND MA9075)

Dear Mr. Kingsley:

The U.S. Nuclear Regulatory Commission (Commission) has issued the enclosed Amendment No. 142 to Facility Operating License No. NPF-11 and Amendment No. 128 to Facility Operating License No. NPF-18 for the LaSalle County Station, Units 1 and 2, respectively. The amendments are in response to your application dated May 31, 2000.

The amendments delete the requirements related to the shorting links from Technical Specification (TS) Sections 3/4.3.1, "Reactor Protection System Instrumentation;" 3/4.9.2, "Refueling Operations Instrumentation;" and 3/4.10.3, "Shutdown Margin Demonstrations;" and will increase the required signal-to-noise ratio for the source range monitor in TS Sections 3/4.9.2 and 3/4.3.7.6, "Source Range Monitors."

A copy of the Safety Evaluation is also enclosed. The Notice of Issuance will be included in the Commission's biweekly Federal Register notice.

Sincerely,

/RA/

Donna M. Skay, Project Manager, Section 2
Project Directorate III
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket Nos. 50-373, 50-374

Enclosures: 1. Amendment No. 142 to NPF-11
2. Amendment No. 128 to NPF-18
3. Safety Evaluation

cc w/encls: See next page

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OGC, O15B18

*concurring by memo dtd 8/17/00; no major revisions

DOCUMENT NAME: G:\PDIII-2\lasalle\ma9074.amd.wpd

OFFICE	PM:LPD3	LAI:LPD3	NRR:EEIB	OGC	SC:LPD3
NAME	DSKAY	CMOORE	*EMARINOS	K. Haffley	AMENDIOLA
DATE	09/13/00	09/12/00	8/17/00	09/27/00	10/10/00

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10/5/00



UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

October 10, 2000

Mr. Oliver D. Kingsley, President
Nuclear Generation Group
Commonwealth Edison Company
Executive Towers West III
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The amendments delete the requirements related to the shorting links from Technical Specification (TS) Sections 3/4.3.1, "Reactor Protection System Instrumentation;" 3/4.9.2, "Refueling Operations Instrumentation;" and 3/4.10.3, "Shutdown Margin Demonstrations;" and will increase the required signal-to-noise ratio for the source range monitor in TS Sections 3/4.9.2 and 3/4.3.7.6, "Source Range Monitors."

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Sincerely,

Donna M. Skay, Project Manager, Section 2
Project Directorate III
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket Nos. 50-373, 50-374

Enclosures: 1. Amendment No. 142 to NPF-11
2. Amendment No. 128 to NPF-18
3. Safety Evaluation

cc w/encls: See next page

O. Kingsley
Commonwealth Edison Company

LaSalle County Station
Units 1 and 2

cc:

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

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

Assistant Attorney General
100 W. Randolph St. Suite 12
Chicago, Illinois 60601

Document Control Desk-Licensing
Commonwealth Edison Company
1400 Opus Place, Suite 400
Downers Grove, Illinois 60515

U.S. NRC-LaSalle Resident Inspectors Office
2605 N. 21st Road
Marseilles, Illinois 61341-9756

Commonwealth Edison Company
Site Vice President - LaSalle
2601 N. 21st Road
Marseilles, Illinois 61341-9757

Chairman
LaSalle County Board
707 Etna Road
Ottawa, Illinois 61350

Mr. David Helwig
Senior Vice President
Commonwealth Edison Company
Executive Towers West III
1400 Opus Place, Suite 900
Downers Grove, Illinois 60515

Attorney General
500 S. Second Street
Springfield, Illinois 62701

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

Mr. Gene H. Stanley
Vice President - Nuclear Operations
Commonwealth Edison Company
Executive Towers West III
1400 Opus Place, Suite 900
Downers Grove, Illinois 60515

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

Mr. Christopher Crane
Senior VP - Nuclear Operations
Commonwealth Edison Company
Executive Towers West III
1400 Opus Place, Suite 900
Downers Grove, Illinois 60515

Regional Administrator
U.S. NRC, Region III
801 Warrenville Road
Lisle, Illinois 60532-4351

Commonwealth Edison Company
LaSalle Station Manager
2601 N. 21st Road
Marseilles, Illinois 61341-9757

**O. Kingsley
Commonwealth Edison Company**

- 2 -

**LaSalle County Station
Units 1 and 2**

**Mr. R. M. Krich
Vice President - Regulatory Services
Commonwealth Edison Company
Executive Towers West III
1400 Opus Place, Suite 500
Downers Grove, Illinois 60515**

**Commonwealth Edison Company
Reg. Assurance Supervisor - LaSalle
2601 N. 21st Road
Marseilles, Illinois 61341-9757**

**Ms. Pamela B. Stroebe
Senior Vice President and General Counsel
Commonwealth Edison Company
P.O. Box 767
Chicago, Illinois 60690-0767**



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

COMMONWEALTH EDISON COMPANY

DOCKET NO. 50-373

LASALLE COUNTY STATION, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 142
License No. NPF-11

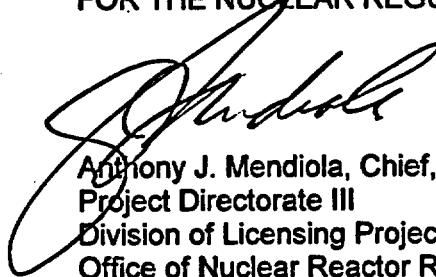
1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment filed by the Commonwealth Edison Company (the licensee), dated May 31, 2000, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations set forth in 10 CFR Chapter I;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the enclosure to this license amendment and paragraph 2.C.(2) of the Facility Operating License No. NPF-11 is hereby amended to read as follows:

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 142 , and the Environmental Protection Plan contained in Appendix B, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of the date of its issuance and shall be implemented within 60 days.

FOR THE NUCLEAR REGULATORY COMMISSION



Anthony J. Mendiola, Chief, Section 2
Project Directorate III
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: October 10, 2000

ATTACHMENT TO LICENSE AMENDMENT NO. 142

FACILITY OPERATING LICENSE NO. NPF-11

DOCKET NO. 50-373

Replace the following pages of the Appendix "A" Technical Specifications with the enclosed pages. The revised pages are identified by amendment number and contain a vertical line indicating the area of change.

REMOVE

3/4 3-2
3/4 3-5
3/4 3-72
3/4 9-3
3/4 9-4
3/4 10-3

INSERT

3/4 3-2
3/4 3-5
3/4 3-72
3/4 9-3
3/4 9-4
3/4 10-3

TABLE 3.3.1-1

REACTOR PROTECTION SYSTEM INSTRUMENTATION

<u>FUNCTIONAL UNIT</u>	<u>APPLICABLE OPERATIONAL CONDITIONS</u>	<u>MINIMUM OPERABLE CHANNELS PER TRIP SYSTEM (a)</u>	<u>ACTION</u>
1. Intermediate Range Monitors:			
a. Neutron Flux - High	2 3, 4 5	3 2 3	1 2 3
b. Inoperative	2 3, 4 5	3 2 3	1 2 3
2. Average Power Range Monitor: ^(c)			
a. Neutron Flux - High, Setdown	2 3 5	2 2 2	1 2 3
b. Flow Biased Simulated Thermal Power-Upscale	1	2	4
c. Fixed Neutron Flux-High	1	2	4
d. Inoperative	1, 2 3 5	2 2 2	1 2 3
3. Reactor Vessel Steam Dome Pressure - High	1, 2 ^(d)	2	1
4. Reactor Vessel Water Level - Low, Level 3	1, 2	2	1
5. Main Steam Line Isolation Valve - Closure	1 ^(e)	4	4
6. DELETED			

TABLE 3.3.1-1 (Continued)

REACTOR PROTECTION SYSTEM INSTRUMENTATION

TABLE NOTATIONS

- (a) A channel may be placed in an inoperable status for up to 6 hours for required surveillance without placing the channel in the tripped condition provided at least one OPERABLE channel in the same trip system is monitoring that parameter.
- (b) Deleted.
- (c) An APRM channel is inoperable if there are less than 2 LPRM inputs per level or less than 14 LPRM inputs to an APRM channel.
- (d) This function is not required to be OPERABLE when the reactor pressure vessel head is unbolted or removed per Specification 3.10.1.
- (e) This function shall be automatically bypassed when the reactor mode switch is not in the Run position.
- (f) This function is not required to be OPERABLE when PRIMARY CONTAINMENT INTEGRITY is not required.
- (g) Also actuates the standby gas treatment system.
- (h) With any control rod withdrawn. Not applicable to control rods removed per Specification 3.9.10.1 or 3.9.10.2.
- (i) This function shall not be automatically bypassed when THERMAL POWER is greater than or equal to 25% of RATED THERMAL POWER.
- (j) Also actuates the EOC-RPT system.

INSTRUMENTATION

SOURCE RANGE MONITORS

LIMITING CONDITION FOR OPERATION

3.3.7.6 At least three source range monitor channels shall be OPERABLE.

APPLICABILITY: OPERATIONAL CONDITIONS 2*, 3, and 4.

ACTION:

- a. In OPERATIONAL CONDITION 2* with one of the above required source range monitor channels inoperable, restore at least three source range monitor channels to OPERABLE status within 4 hours or be in at least HOT SHUTDOWN within the next 12 hours.
- b. In OPERATIONAL CONDITION 3 or 4 with two or more of the above required source range monitor channels inoperable, verify all insertable control rods to be inserted in the core and lock the reactor mode switch in the Shutdown position within 1 hour.

SURVEILLANCE REQUIREMENTS

4.3.7.6 Each of the above required source range monitor channels shall be demonstrated OPERABLE by:

- a. Performance of a:
 1. CHANNEL CHECK at least once per:
 - a) 12 hours in CONDITION 2*, and
 - b) 24 hours in CONDITION 3 or 4.
 2. CHANNEL CALIBRATION** at least once per 18 months.
- b. Performance of a CHANNEL FUNCTIONAL TEST:
 1. Within 24 hours prior to moving the reactor mode switch from the Shutdown position, if not performed within the previous 7 days, and
 2. At least once per 31 days.
- c. Verifying, prior to withdrawal of control rods, that the SRM count rate is at least 0.7 cps# with the detector fully inserted.

*With IRM's on range 2 or below.

**Neutron detectors may be excluded from CHANNEL CALIBRATION.

#Provided signal-to-noise ratio is ≥ 20 . Otherwise, 3 cps.

REFUELING OPERATIONS

3/4.9.2 INSTRUMENTATION

LIMITING CONDITION FOR OPERATION

3.9.2 At least 2 source range monitor* (SRM) channels shall be OPERABLE# and inserted to the normal operating level with:

- a. Continuous visual indication in the control room, and
- b. One of the required SRM detectors located in the quadrant where CORE ALTERATIONS are being performed and the other required SRM detector located in an adjacent quadrant.

APPLICABILITY: OPERATIONAL CONDITION 5, unless the following conditions are met:

- a. No more than four (4) fuel assemblies are present in each core quadrant associated with an SRM;
- b. While in core, these four fuel assemblies are in locations adjacent to the SRM; and
- c. In the case of movable detectors, detector location shall be selected such that each group of fuel assemblies is separated by at least two (2) fuel cell locations from any other fuel assemblies.

ACTION:

With the requirements of the above specification not satisfied, immediately suspend all operations involving CORE ALTERATIONS and insert all insertable control rods.

SURVEILLANCE REQUIREMENTS

4.9.2 Each of the above required SRM channels shall be demonstrated OPERABLE by:

- a. At least once per 12 hours:
 1. Performance of a CHANNEL CHECK,
 2. Verifying the detectors are inserted to the normal operating level, and
 3. During CORE ALTERATIONS, verifying that the detector of an OPERABLE SRM channel is located in the core quadrant where CORE ALTERATIONS are being performed and another is located in an adjacent quadrant.

*The use of special movable detectors during CORE ALTERATIONS in place of the normal SRM nuclear detectors is permissible as long as these special detectors are connected to the normal SRM circuits.

#The normal or emergency power source may be inoperable.

REFUELING OPERATIONS

SURVEILLANCE REQUIREMENTS (Continued)

- b. Performance of a CHANNEL FUNCTIONAL TEST:
 - 1. Within 24 hours prior to the start of CORE ALTERATIONS, and
 - 2. At least once per 7 days.
- c. Verifying that the channel count rate is at least 0.7 cps[#]:
 - 1. Prior to control rod withdrawal,
 - 2. Prior to and at least once per 12 hours during CORE ALTERATIONS, and
 - 3. At least once per 24 hours.

[#]Provided signal-to-noise ratio is ≥ 20 . Otherwise, 3 cps.

SPECIAL TEST EXCEPTIONS

3/4.10.3 SHUTDOWN MARGIN DEMONSTRATIONS

LIMITING CONDITION FOR OPERATION

3.10.3 The provisions of Specification 3.9.1, Specification 3.9.3 and Table 1.2 may be suspended to permit the reactor mode switch to be in the Startup position and to allow more than one control rod to be withdrawn for shutdown margin demonstration, provided that at least the following requirements are satisfied.

- a. The source range monitors are OPERABLE per Specification 3.9.2.
- b. The rod worth minimizer is OPERABLE per Specification 3.1.4.1 and is programmed for the shutdown margin demonstration, or conformance with the shutdown margin demonstration procedure is verified by a second licensed operator or other technically qualified member of the unit technical staff.
- c. The "rod-out-notch-override" control shall not be used during out-of-sequence movement of the control rods.
- d. No other CORE ALTERATIONS are in progress.

APPLICABILITY: OPERATIONAL CONDITION 5, during shutdown margin demonstrations.

ACTION:

With the requirements of the above specification not satisfied, immediately place the reactor mode switch in the Shutdown or Refuel position.

SURVEILLANCE REQUIREMENTS

4.10.3 Within 30 minutes prior to and at least once per 12 hours during the performance of a shutdown margin demonstration, verify that;

- a. The source range monitors are OPERABLE per Specification 3.9.2,
- b. The rod worth minimizer is OPERABLE with the required program per Specification 3.1.4.1 or a second licensed operator or other technically qualified member of the unit technical staff is present and verifies compliance with the shutdown demonstration procedures, and
- c. No other CORE ALTERATIONS are in progress.



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
WASHINGTON, D.C. 20555-0001

COMMONWEALTH EDISON COMPANY

DOCKET NO. 50-374

LASALLE COUNTY STATION, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 128
License No. NPF-18

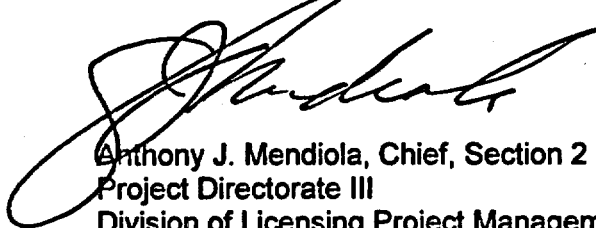
1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment filed by the Commonwealth Edison Company (the licensee), dated May 31, 2000, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations set forth in 10 CFR Chapter I;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the enclosure to this license amendment and paragraph 2.C.(2) of the Facility Operating License No. NPF-18 is hereby amended to read as follows:

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 128, and the Environmental Protection Plan contained in Appendix B, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of the date of its issuance and shall be implemented within 60 days.

FOR THE NUCLEAR REGULATORY COMMISSION



Anthony J. Mendiola, Chief, Section 2
Project Directorate III
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: October 10, 2000

ATTACHMENT TO LICENSE AMENDMENT NO. 128

FACILITY OPERATING LICENSE NO. NPF-18

DOCKET NO. 50-374

Replace the following pages of the Appendix "A" Technical Specifications with the enclosed pages. The revised pages are identified by amendment number and contain a vertical line indicating the area of change.

REMOVE

3/4 3-2
3/4 3-5
3/4 3-72
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3/4 9-4
3/4 10-3

INSERT

3/4 3-2
3/4 3-5
3/4 3-72
3/4 9-3
3/4 9-4
3/4 10-3

TABLE 3.3.1-1

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2. Average Power Range Monitor: ^(c)			
a. Neutron Flux - High, Setdown	2 3 5	2 2 2	1 2 3
b. Flow Biased Simulated Thermal Power-Upscale	1	2	4
c. Fixed Neutron Flux-High	1	2	4
d. Inoperative	1, 2 3 5	2 2 2	1 2 3
3. Reactor Vessel Steam Dome Pressure - High	1, 2 ^(d)	2	1
4. Reactor Vessel Water Level - Low, Level 3	1, 2	2	1
5. Main Steam Line Isolation Valve - Closure	1 ^(e)	4	4
6. DELETED			

TABLE 3.3.1-1 (Continued)

REACTOR PROTECTION SYSTEM INSTRUMENTATION

TABLE NOTATIONS

- (a) A channel may be placed in an inoperable status for up to 6 hours for required surveillance without placing the channel in the tripped condition provided at least one OPERABLE channel in the same trip system is monitoring that parameter.
- (b) Deleted.
- (c) An APRM channel is inoperable if there are less than 2 LPRM inputs per level or less than 14 LPRM inputs to an APRM channel.
- (d) This function is not required to be OPERABLE when the reactor pressure vessel head is unbolted or removed per Specification 3.10.1.
- (e) This function shall be automatically bypassed when the reactor mode switch is not in the Run position.
- (f) This function is not required to be OPERABLE when PRIMARY CONTAINMENT INTEGRITY is not required.
- (g) Also actuates the standby gas treatment system.
- (h) With any control rod withdrawn. Not applicable to control rods removed per Specification 3.9.10.1 or 3.9.10.2.
- (i) This function shall not be automatically bypassed when THERMAL POWER is greater than or equal to 25% of RATED THERMAL POWER.
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INSTRUMENTATION

SOURCE RANGE MONITORS

LIMITING CONDITION FOR OPERATION

3.3.7.6 At least three source range monitor channels shall be OPERABLE.

APPLICABILITY: OPERATIONAL CONDITIONS 2*, 3, and 4.

ACTION:

- a. In OPERATIONAL CONDITION 2* with one of the above required source range monitor channels inoperable, restore at least three source range monitor channels to OPERABLE status within 4 hours or be in at least HOT SHUTDOWN within the next 12 hours.
- b. In OPERATIONAL CONDITION 3 or 4 with two or more of the above required source range monitor channels inoperable, verify all insertable control rods to be inserted in the core and lock the reactor mode switch in the Shutdown position within 1 hour.

SURVEILLANCE REQUIREMENTS

4.3.7.6 Each of the above required source range monitor channels shall be demonstrated OPERABLE by:

- a. Performance of a:
 1. CHANNEL CHECK at least once per:
 - a) 12 hours in CONDITION 2*, and
 - b) 24 hours in CONDITION 3 or 4.
 2. CHANNEL CALIBRATION** at least once per 18 months.
- b. Performance of a CHANNEL FUNCTIONAL TEST:
 1. Within 24 hours prior to moving the reactor mode switch from the Shutdown position, if not performed within the previous 7 days, and
 2. At least once per 31 days.
- c. Verifying, prior to withdrawal of control rods, that the SRM count rate is at least 0.7 cps# with the detector fully inserted.

*With IRM's on range 2 or below.

**Neutron detectors may be excluded from CHANNEL CALIBRATION.

#Provided signal-to-noise ratio is ≥ 20 . Otherwise, 3 cps.

REFUELING OPERATIONS

3/4.9.2 INSTRUMENTATION

LIMITING CONDITION FOR OPERATION

3.9.2 At least 2 source range monitor* (SRM) channels shall be OPERABLE* and inserted to the normal operating level with:

- a. Continuous visual indication in the control room, and
- b. One of the required SRM detectors located in the quadrant where CORE ALTERATIONS are being performed and the other required SRM detector located in an adjacent quadrant.

APPLICABILITY: OPERATIONAL CONDITION 5, unless the following conditions are met:

- a. No more than four (4) fuel assemblies are present in each core quadrant associated with an SRM;
- b. While in core, these four fuel assemblies are in locations adjacent to the SRM; and
- c. In the case of movable detectors, detector location shall be selected such that each group of fuel assemblies is separated by at least two (2) fuel cell locations from any other fuel assemblies.

ACTION:

With the requirements of the above specification not satisfied, immediately suspend all operations involving CORE ALTERATIONS and insert all insertable control rods.

SURVEILLANCE REQUIREMENTS

4.9.2 Each of the above required SRM channels shall be demonstrated OPERABLE by:

- a. At least once per 12 hours:
 1. Performance of a CHANNEL CHECK,
 2. Verifying the detectors are inserted to the normal operating level, and
 3. During CORE ALTERATIONS, verifying that the detector of an OPERABLE SRM channel is located in the core quadrant where CORE ALTERATIONS are being performed and another is located in an adjacent quadrant.

*The use of special movable detectors during CORE ALTERATIONS in place of the normal SRM nuclear detectors is permissible as long as these special detectors are connected to the normal SRM circuits.

#The normal or emergency power source may be inoperable.

REFUELING OPERATIONS

SURVEILLANCE REQUIREMENTS (Continued)

- b. Performance of a CHANNEL FUNCTIONAL TEST:
 - 1. Within 24 hours prior to the start of CORE ALTERATIONS, and
 - 2. At least once per 7 days.
- c. Verifying that the channel count rate is at least 0.7 cps[#]:
 - 1. Prior to control rod withdrawal,
 - 2. Prior to and at least once per 12 hours during CORE ALTERATIONS, and
 - 3. At least once per 24 hours.

[#]Provided signal-to-noise ratio is ≥ 20 . Otherwise, 3 cps.

SPECIAL TEST EXCEPTIONS

3/4.10.3 SHUTDOWN MARGIN DEMONSTRATIONS

LIMITING CONDITION FOR OPERATION

3.10.3 The provisions of Specification 3.9.1, Specification 3.9.3 and Table 1.2 may be suspended to permit the reactor mode switch to be in the Startup position and to allow more than one control rod to be withdrawn for shutdown margin demonstration, provided that at least the following requirements are satisfied.

- a. The source range monitors are OPERABLE per Specification 3.9.2.
- b. The rod worth minimizer is OPERABLE per Specification 3.1.4.1 and is programmed for the shutdown margin demonstration, or conformance with the shutdown margin demonstration procedure is verified by a second licensed operator or other technically qualified member of the unit technical staff.
- c. The "rod-out-notch-override" control shall not be used during out-of-sequence movement of the control rods.
- d. No other CORE ALTERATIONS are in progress.

APPLICABILITY: OPERATIONAL CONDITION 5, during shutdown margin demonstrations.

ACTION:

With the requirements of the above specification not satisfied, immediately place the reactor mode switch in the Shutdown or Refuel position.

SURVEILLANCE REQUIREMENTS

4.10.3 Within 30 minutes prior to and at least once per 12 hours during the performance of a shutdown margin demonstration, verify that;

- a. The source range monitors are OPERABLE per Specification 3.9.2,
- b. The rod worth minimizer is OPERABLE with the required program per Specification 3.1.4.1 or a second licensed operator or other technically qualified member of the unit technical staff is present and verifies compliance with the shutdown demonstration procedures, and
- c. No other CORE ALTERATIONS are in progress.



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 142 TO FACILITY OPERATING LICENSE NO. NPF-11
AND AMENDMENT NO. 128 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 a letter dated May 31, 2000, Commonwealth Edison Company (ComEd, the licensee) requested NRC's approval to amend its operating licenses NPF-11 and NPF-18 for LaSalle County Station, Units 1 and 2, by revising the plant's Technical Specifications (TS). The proposed amendments will delete the requirement to remove the reactor protection system (RPS) circuitry shorting links from TS Sections 3/4.3.1, "Reactor Protection System Instrumentation;" 3/4.9.2, "Refueling Operations Instrumentation;" and 3/4.10.3, "Shutdown Margin Demonstrations;" and will increase the value of a signal-to-noise ratio of the source range monitors (SRM) in TS Sections 3/4.3.7.6, "Source Range Monitors," and 3/4.9.2. The deleted RPS shorting link requirements will be relocated to the updated final safety analysis report (UFSAR) and will then be controlled in accordance with the requirements of 10 CFR 50.59, "Changes, tests and experiments."

2.0 BACKGROUND

At LaSalle, Units 1 and 2, the reactor scram logic for Intermediate-range monitors (IRMs) and average power range monitors (APRMs) is configured in a one-out-of-two-taken-twice (coincident) combination with the RPS circuit shorting links installed in the reactor scram circuit. Also, the non-coincident logic for SRM high-flux scram is disabled while the RPS shorting links are installed in the RPS circuit. Therefore, while the shorting link is in the RPS scram circuit, a single neutron flux channel trip would not result in full scram but in only a half scram. Removal of the RPS circuitry shorting links from the reactor scram circuit, however, alters the full-scram logic configuration for the IRMs and the APRMs from coincident to a non-coincident type and enables the non-coincident logic for the SRM's high-flux scram. Therefore, when the RPS shorting links are removed, a single trip in any SRM, IRM, or APRM instrument channel will result in a full scram as a result of an altered non-coincident logic configuration.

In its application, the licensee stated that during Operational Condition 5, "Refueling," control rod drive (CRD) testing is performed after completion of a given set of fuel movements and appropriate reactor core verification. In addition, maintenance work is performed on the reactor pressure vessel during this period. Because of these test and maintenance activities, the chance of a single spurious trip of any SRM, IRM, or APRM instrument channel is greatly

increased. During Operational Condition 5, TS Sections 3/4.3.1, 3/4.9.2, and 3/4.10.3 require that the shorting links be removed from the RPS circuitry before and during the time any control rod is withdrawn and during shutdown margin demonstrations. As previously described, removal of the RPS shorting links makes the logic vulnerable to an unwarranted full scram as a result of a spurious single trip of any neutron flux monitoring instrument channel. A full scram forces high-pressure water through the CRD seals, and frequent forcing of water through the CRD seals has the potential of causing premature degradation that could result in an unnecessary radiation dose to plant personnel because of more frequent maintenance.

3.0 PROPOSED CHANGES AND EVALUATION

A. Proposed Changes:

Relocate the following TS to the UFSAR and the Administrative Technical Requirements (ATRs):

1. TS Table 3.3.1-1, Note (b) and its associated footnote *;
2. TS Limiting Condition of Operation (LCO) 3.9.2.c and TS Surveillance Requirement (SR) 4.9.2.d;
3. TS Section 3/4.9.2, footnote ##, which exempts control rods removed in accordance with TS Section 3.9.10.1 or TS Section 3.9.10.2 from this requirement for both TS Sections 3.9.2.c and 4.9.2.d; and
4. In TS LCO 3.10.3.a, the requirement to remove the RPS circuitry shorting links.

Evaluation: The current TS Sections 3/4.3.1, "Reactor Protection System Instrumentation," 3/4.9.2, "Refueling Operations Instrumentation," and 3/4.10.3, "Shutdown Margin Demonstrations," require that the shorting links be removed from the RPS circuitry before and during the time any control rod is withdrawn and during shutdown margin demonstrations. The proposed changes delete the requirement to remove RPS circuitry shorting links from TS Sections 3/4.3.1, 3/4.9.2, and 3/4.10.3 and relocate its description and function to the UFSAR.

In its submittal, the licensee stated that deleting the TS requirement to remove the RPS circuitry shorting links would prevent a single spurious channel trip from causing a full reactor scram. As previously explained, this measure will reduce the potential for an unnecessary radiation dose to plant personnel as a result of the more frequent maintenance in the CRD seals area. The staff has determined that keeping the shorting links installed in the RPS scram circuit and not removing them in Operational Condition 5 is acceptable on the following basis: (1) removal of the RPS circuitry shorting links is not assumed in any design-basis accident (DBA) for LaSalle; (2) the SRM non-coincident high-flux full-scram logic is not credited in any DBA; (3) the IRM and APRM one-out-of-two-taken-twice full-scram logic provides the credited protection with respect to safety analysis; (4) the SRM, IRM, and APRM control rod withdrawal block interlocks are not affected by the removal or installation of the RPS circuitry

shorting links; and (5) refueling interlocks and shutdown margin requirements ensure that the reactor is maintained in a subcritical condition in Operational Condition 5. In addition, the proposed changes to delete the TS requirements to remove the RPS circuitry shorting links and relocate them to the UFSAR are consistent with NUREG-1434, Revision 1, "Standard Technical Specifications for General Electric Plants, BWR/6" Improved Standard TS (ISTS).

Section 182a of the Atomic Energy Act requires applicants for nuclear power plant operating licenses to state the TSs to be included as part of the license. The Commission's regulatory requirements related to the content of the TSs are set forth in 10 CFR 50.36. That regulation requires the TSs to include items in five specific categories, including (1) safety limits, limiting safety system settings and limiting control settings; (2) limiting conditions for operation; (3) surveillance requirements; (4) design features; and (5) administrative controls. However, the regulation does not specify the particular requirements to be included in a plant's TSs.

The four criteria defined in 10 CFR 50.36 to be used in determining whether a particular limiting condition for operation (LCO) and related surveillance is required to be included in the TSs are as follows:

- (1) installed instrumentation that is used to detect, and indicate in the control room a significant abnormal degradation of the reactor coolant pressure boundary;
- (2) a process variable, design feature, or operating restriction that is an initial condition of a design basis accident or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier;
- (3) a structure, system, or component that is part of the primary success path and which functions or actuates to mitigate a design basis accident or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier; and
- (4) a structure, system, or component which operating experience or probabilistic safety assessment has shown to be significant to public health and safety.

As a result, existing TS requirements which fall within or satisfy any of the criteria in 10 CFR 50.36 must be retained in the TSs, while those TS requirements that do not fall within or satisfy these criteria may be relocated to other licensee controlled documents. The staff has determined that the TSs listed above do not satisfy the criteria in 10 CFR 50.36 and may be relocated to other licensee controlled documents.

- B. **Proposed Change:** The licensee proposes to revise footnote # of TS SRs 4.3.7.6.c and 4.9.2.c to correct the required SRM count rate signal-to-noise ratio. The signal-to-noise ratio must be greater than or equal to (\geq)20 for a count rate of at least 0.7 counts per second (cps), otherwise the count rate must be \geq 3 cps. In addition, typographical errors in footnote # of TS 3.3.7.6 of the Unit 1 and 2 TS are being corrected.

Evaluation: The proposed change revises the SRM signal-to-noise ratio from $\geq 2:1$ to $\geq 20:1$ for a condition in which the SRM count rate is ≥ 0.7 cps and less than 3 cps. In its submittal, the licensee stated that the current TS requirement for a minimum SRM count rate of 0.7 cps was based on the low neutron flux level that occurs during a refueling outage. General Electric Company (GE) Service Information Letter (SIL) 478, "SRM Minimum Count Rate," indicated that an SRM signal-to-noise ratio of $\geq 2:1$ provides a statistical neutron flux monitoring confidence of 95 percent that the indicated signal is correct with a minimum count of 3 cps. However, in order to provide a statistical neutron flux monitoring confidence of 95 percent that the indicated signal is correct for a count rate of 0.7 cps, the GE study concluded that an SRM signal-to-noise ratio of $\geq 20:1$ is required. The licensee stated that the proposed change incorporates the results of the GE study. The staff finds the proposed change acceptable.

4.0 SUMMARY

Based on its review, the staff has determined that the proposed changes do not involve a significant increase in the probability of occurrence or increase in the consequences of an accident previously evaluated, do not create the possibility of a new or different kind of accident from any previously analyzed, and do not involve a significant reduction in margin of safety. Also, the staff finds that the proposed changes should improve personnel safety by reducing the chances of additional occupational radiation exposure and will provide a statistical neutron flux monitoring confidence of 95 percent that the SRM-indicated signal is correct for a count rate of 0.7 cps. Therefore, the staff approves the proposed changes.

5.0 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.

6.0 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 and change surveillance requirements. 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 (65 FR 48745). 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.

7.0 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: S. V. Athavale

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