

April 14, 1998

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: ISSUANCE OF AMENDMENTS (TAC NOS. MA0325 AND MA0326)

Dear Mr. Kingsley:

The U.S. Nuclear Regulatory Commission (Commission) has issued the enclosed Amendment No. 124 to Facility Operating License No. NPF-11 and Amendment No. 109 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 December 12, 1997.

The amendments revise the bypass logic for Main Steam Isolation Valve Isolation Actuation Instrumentation on Condenser Low Vacuum as stated in Note \* of TS Tables 3.3.2-1 and 4.3.2.1-1.

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,

ORIG. SIGNED BY:  
Donna M. Skay, Project Manager  
Project Directorate III-2  
Division of Reactor Projects - III/IV  
Office of Nuclear Reactor Regulation

Docket Nos. 50-373, 50-374

- Enclosures: 1. Amendment No. 124 to NPF-11
- 2. Amendment No. 109 to NPF-18
- 3. Safety Evaluation

cc w/encl: see next page

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MAILED 03/16/98



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

April 14, 1998

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: ISSUANCE OF AMENDMENTS (TAC NOS. MA0325 AND MA0326)

Dear Mr. Kingsley:

The U.S. Nuclear Regulatory Commission (Commission) has issued the enclosed Amendment No. 124 to Facility Operating License No. NPF-11 and Amendment No. 106 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 December 12, 1997.

The amendments revise the bypass logic for Main Steam Isolation Valve Isolation Actuation Instrumentation on Condenser Low Vacuum as stated in Note \* of TS Tables 3.3.2-1 and 4.3.2.1-1.

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,

A handwritten signature in black ink, appearing to read "Donna M. Skay".

Donna M. Skay, Project Manager  
Project Directorate III-2  
Division of Reactor Projects - III/IV  
Office of Nuclear Reactor Regulation

Docket Nos. 50-373, 50-374

Enclosures: 1. Amendment No. 124 to NPF-11  
2. Amendment No. 106 to NPF-18  
3. Safety Evaluation

cc w/encl: see next page

O. Kingsley  
Commonwealth Edison Company

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Units 1 and 2

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- 2 -

LaSalle County Station  
Units 1 and 2

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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. 124  
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 December 12, 1997, 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:

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(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 124, 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 prior to startup from L1F35.

FOR THE NUCLEAR REGULATORY COMMISSION



Donna M. Skay, Project Manager  
Project Directorate III-2  
Division of Reactor Projects - III/IV  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: April 14, 1998

ATTACHMENT TO LICENSE AMENDMENT NO. 124

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 3-14  
3/4 3-22  
B 3/4 3-2  
B 3/4 3-2a  
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INSERT

3/4 3-14  
3/4 3-22  
B 3/4 3-2  
B 3/4 3-2a  
B 3/4 3-2b

TABLE 3.3.2-1 (Continued)

ISOLATION ACTUATION INSTRUMENTATION

ACTION

- ACTION 20 - Be in at least HOT SHUTDOWN within 12 hours and in COLD SHUTDOWN within the next 24 hours.
- ACTION 21 - Be in at least STARTUP with the associated isolation valves closed within 6 hours or be in at least HOT SHUTDOWN within 12 hours and in COLD SHUTDOWN within the next 24 hours.
- ACTION 22 - Close the affected system isolation valves within 1 hour and declare the affected system inoperable.
- ACTION 23 - Be in at least STARTUP within 6 hours.
- ACTION 24 - Establish SECONDARY CONTAINMENT INTEGRITY with the standby gas treatment system operating within 1 hour.
- ACTION 25 - Lock the affected system isolation valves closed within 1 hour and declare the affected system inoperable.
- ACTION 26 - Provided that the manual initiation function is OPERABLE for each other group valve, inboard or outboard, as applicable, in each line, restore the manual initiation function to OPERABLE status within 24 hours; otherwise, restore the manual initiation function to OPERABLE status within 8 hours; otherwise:
- a. Be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours, or
  - b. Close the affected system isolation valves within the next hour and declare the affected system inoperable.

NOTES

- \* May be bypassed with all turbine stop valves not full open.
- \*\* When handling irradiated fuel in the secondary containment and during CORE ALTERATIONS and operations with a potential for draining the reactor vessel.
- # During CORE ALTERATIONS and operations with a potential for draining the reactor vessel.
- (a) Deleted.
- (b) 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 other OPERABLE channel in the same trip system is monitoring that parameter. In addition for those trip systems with a design providing only one channel per trip system, the channel may be placed in an inoperable status for up to 8 hours for required surveillance testing without placing the channel in the tripped condition provided that the redundant isolation valve, inboard or outboard, as applicable, in each line is operable and all required actuation instrumentation for that redundant valve is OPERABLE, or place the trip system in the tripped condition.
- (c) Also actuates the standby gas treatment system.
- (d) A channel is OPERABLE if 2 of 4 instruments in that channel are OPERABLE.
- (e) Also actuates secondary containment ventilation isolation dampers per Table 3.6.5.2-1.
- (f) Closes only RWCU system inlet outboard valve.

TABLE 4.3.2.1-1 (Continued)

ISOLATION ACTUATION INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>TRIP FUNCTION</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL FUNCTIONAL TEST</u>	<u>CHANNEL CALIBRATION</u>	<u>OPERATIONAL CONDITIONS FOR WHICH SURVEILLANCE REQUIRED</u>
<b>6. <u>RHR SYSTEM SHUTDOWN COOLING MODE ISOLATION</u></b>				
a. Reactor Vessel Water Level Low, Level 3	S	Q	R	1, 2, 3
b. Reactor Vessel (RHR Cut-in Permissive) Pressure-High	NA	Q	Q	1, 2, 3
c. RHR Pump Suction Flow-High	NA	Q	Q	1, 2, 3
d. RHR Area Temperature-High	NA	Q	Q	1, 2, 3
e. RHR Equipment Area ΔT-High	NA	Q	Q	1, 2, 3
<b>B. <u>MANUAL INITIATION</u></b>				
1. Inboard Valves	NA	R	NA	1, 2, 3
2. Outboard Valves	NA	R	NA	1, 2, 3
3. Inboard Valves	NA	R	NA	1, 2, 3 and **, #
4. Outboard Valves	NA	R	NA	1, 2, 3 and **, #
5. Inboard Valves	NA	R	NA	1, 2, 3
6. Outboard Valves	NA	R	NA	1, 2, 3
7. Outboard Valve	NA	R	NA	1, 2, 3

\* Not required when all turbine stop valves are not full open.

\*\* When handling irradiated fuel in the secondary containment and during CORE ALTERATIONS and operations with a potential for draining the reactor vessel.

# During CORE ALTERATIONS and operations with a potential for draining the reactor vessel.

## INSTRUMENTATION

### BASES

#### 3/4.3.1 REACTOR PROTECTION SYSTEM INSTRUMENTATION (Continued)

Functional Units, response time testing for the remaining channel components, including any analog trip units, is required. This allowance is supported by NEDO-32291-A, "System Analyses for the Elimination of Selected Response Time Testing Requirements," October 1995.

Response time may be demonstrated by any series of sequential, overlapping or total channel test measurement, provided such tests demonstrate the total channel response time as defined. Sensor response time verification may be demonstrated by either (1) in place, onsite or offsite test measurements, or (2) utilizing replacement sensors with certified response times.

#### 3/4.3.2 ISOLATION ACTUATION INSTRUMENTATION

This specification ensures the effectiveness of the instrumentation used to mitigate the consequences of accidents by prescribing the OPERABILITY trip setpoints and response times for isolation of the reactor systems. When necessary, one channel may be inoperable for brief intervals to conduct required surveillance. Both channels of each trip system for the main steam tunnel ventilation system differential temperature may be placed in an inoperable status for up to 4 hours for required reactor building ventilation system maintenance and testing and 12 hours due to loss of reactor building ventilation or for the required secondary containment Leak Rate test without placing the trip system in the tripped condition. This will allow for maintaining the reliability of the ventilation system and secondary containment. Specified surveillance intervals and surveillance and maintenance outage times have been determined in accordance with NEDC-30851P-A, Supplement 2, "Technical Specification Improvement Analyses for BWR Isolation Instrumentation Common to RPS and ECCS Instrumentation", March 1989, and with NEDC-31677P-A, "Technical Specification Improvement Analysis for BWR Isolation Actuation Instrumentation", July 1990. When a channel is placed in an inoperable status solely for performance of required surveillances, entry into LCO and required ACTIONS may be delayed, provided the associated function maintains primary containment isolation capability. Some of the trip settings may have tolerances explicitly stated where both the high and low values are critical and may have a substantial effect on safety. The setpoints of other instrumentation, where only the high or low end of the setting have a direct bearing on safety, are established at a level away from the normal operating range to prevent inadvertent actuation of the systems involved.

The Condenser Vacuum - Low Function isolates group 1 valves and is provided to prevent overpressurization of the main condenser in the event of a loss of the main condenser vacuum. Since the integrity of the condenser is an assumption in offsite dose calculations, the Condenser Vacuum - Low Function is assumed to be OPERABLE and capable of initiating closure of the MSIVs. The

## INSTRUMENTATION

### BASES

#### 3/4.3.2 ISOLATION ACTUATION INSTRUMENTATION (Continued)

closure of the MSIVs is initiated to prevent the addition of steam that would lead to additional condenser pressurization and possible rupture of the diaphragm installed to protect the turbine exhaust hood, thereby preventing a potential radiation leakage path following an accident.

As noted (footnote \* to Tables 3.3.2-1 and 4.3.2.1-1), the channels are not required to be OPERABLE in MODES 2 and 3, when all turbine stop valves (TSVs) are not full open, since the potential for condenser overpressurization is minimized. Switches are provided to manually bypass the channels when all TSVs are not full open. TSV position setpoints are controlled by TS 2.2.1 and surveillances are performed per TS 4.3.1. The TSV closure scram bypass below 30% power (TS Table 3.3.1-1, Note i) does not affect the TSV position interlocks for the condenser vacuum - low bypass logic.

Except for the MSIVs, the safety analysis does not address individual sensor response times or the response times of the logic systems to which the sensors are connected. For A.C. operated valves, it is assumed that the A.C. power supply is lost and is restored by startup of the emergency diesel generators. In this event, a time of 13 seconds is assumed before the valve starts to move. The safety analysis considers an allowable inventory loss which in turn determines the valve speed in conjunction with the 13 second delay.

For the sensors associated with MSIV isolation, instrumentation channels are not required to be response time tested. Response time testing for the remaining channel components, including any analog trip units, is required. This allowance is supported by NEDO-32291-A, "System Analyses for the Elimination of Selected Response Time Testing Requirements," October 1995.

#### 3/4.3.3 EMERGENCY CORE COOLING SYSTEM ACTUATION INSTRUMENTATION

The emergency core cooling system actuation instrumentation is provided to initiate actions to mitigate the consequences of accidents that are beyond the ability of the operator to control. This specification provides the OPERABILITY requirements, trip setpoints and response times that will ensure effectiveness of the systems to provide the design protection. Although the instruments are listed by system, in some cases the same instrument may be used to send the actuation signal to more than one system at the same time.

Per Note #, the ECCS actuation instrument channels are not required to be response time tested. The overall ECCS response time requirement, which includes diesel generator injection valves, pumps, and other components, still applies. This allowance is supported by NEDO-32291-A, "System Analyses for the Elimination of Selected Response Time Testing Requirements," October 1995.

## INSTRUMENTATION

### BASES

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#### 3/4.3.3 EMERGENCY CORE COOLING SYSTEM ACTUATION INSTRUMENTATION (Continued)

Specified surveillance intervals and surveillance and maintenance outage times have been determined in accordance with NEDC-30936P-A, "Technical Specification Improvement Methodology (With Demonstration for BWR ECCS Actuation Instrumentation)", Parts 1 and 2, December 1988, and RE-025 Revision 1, "Technical Specification Improvement Analysis for the Emergency Core Cooling System Actuation Instrumentation for LaSalle County Station, Units 1 and 2", April 1991. When a channel is placed in an inoperable status solely for performance of required surveillances, entry into LCO and required ACTIONS may be delayed, provided the associated function maintains ECCS initiation capability.



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. 109  
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 December 12, 1997, 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. 109 , 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 prior to startup from L2R07.

FOR THE NUCLEAR REGULATORY COMMISSION



Donna M. Skay, Project Manager  
Project Directorate III-2  
Division of Reactor Projects - III/IV  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: April 14, 1998

ATTACHMENT TO LICENSE AMENDMENT NO. 109

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 3-14  
3/4 3-22  
B 3/4 3-2  
B 3/4 3-2a

INSERT

3/4 3-14  
3/4 3-22  
B 3/4 3-2  
B 3/4 3-2a

TABLE 3.3.2-1 (Continued)  
ISOLATION ACTUATION INSTRUMENTATION

ACTION STATEMENTS

- ACTION 20 - Be in at least HOT SHUTDOWN within 12 hours and in COLD SHUTDOWN within the next 24 hours.
- ACTION 21 - Be in at least STARTUP with the associated isolation valves closed within 6 hours or be in at least HOT SHUTDOWN within 12 hours and in COLD SHUTDOWN within the next 24 hours.
- ACTION 22 - Close the affected system isolation valves within 1 hour and declare the affected system inoperable.
- ACTION 23 - Be in at least STARTUP within 6 hours.
- ACTION 24 - Establish SECONDARY CONTAINMENT INTEGRITY with the standby gas treatment system operating within 1 hour.
- ACTION 25 - Lock the affected system isolation valves closed within 1 hour and declare the affected system inoperable.
- ACTION 26 - Provided that the manual initiation function is OPERABLE for each other group valve, inboard or outboard, as applicable, in each line, restore the manual initiation function to OPERABLE status within 24 hours; otherwise, restore the manual initiation function to OPERABLE status within 8 hours; otherwise:
- a. Be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours, or
  - b. Close the affected system isolation valves within the next hour and declare the affected system inoperable.

TABLE NOTATIONS

- \* May be bypassed with all turbine stop valves not full open.
- \*\* When handling irradiated fuel in the secondary containment and during CORE ALTERATIONS and operations with a potential for draining the reactor vessel.
- # During CORE ALTERATIONS and operations with a potential for draining the reactor vessel.
- (a) Deleted.
- (b) 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 other OPERABLE channel in the same trip system is monitoring that parameter. In addition for those trip systems with a design providing only one channel per trip system, the channel may be placed in an inoperable status for up to 8 hours for required surveillance testing without placing the channel in the tripped condition provided that the redundant isolation valve, inboard or outboard, as applicable, in each line is operable and all required actuation instrumentation for that redundant valve is OPERABLE, or place the trip system in the tripped condition.
- (c) Also actuates the standby gas treatment system.
- (d) A channel is OPERABLE if 2 of 4 instruments in that channel are OPERABLE.
- (e) Also actuates secondary containment ventilation isolation dampers per Table 3.6.5.2-1.
- (f) Closes only RWCU system inlet outboard valve.

TABLE 4.3.2.1-1 (Continued)

ISOLATION ACTUATION INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>TRIP FUNCTION</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL FUNCTIONAL TEST</u>	<u>CHANNEL CALIBRATION</u>	<u>OPERATIONAL CONDITIONS FOR WHICH SURVEILLANCE REQUIRED</u>
<b>6. <u>RHR SYSTEM SHUTDOWN COOLING MODE ISOLATION</u></b>				
a. Reactor Vessel Water Level - Low, Level 3	S	Q	R	1, 2, 3
b. Reactor Vessel (RHR Cut-in Permissive) Pressure-High	NA	Q	Q	1, 2, 3
c. RHR Pump Suction Flow-High	NA	Q	Q	1, 2, 3
d. RHR Area Temperature-High	NA	Q	Q	1, 2, 3
e. RHR Equipment Area $\Delta T$ -High	NA	Q	Q	1, 2, 3
<b>B. <u>MANUAL INITIATION</u></b>				
1. Inboard Valves	NA	R	NA	1, 2, 3
2. Outboard Valves	NA	R	NA	1, 2, 3
3. Inboard Valves	NA	R	NA	1, 2, 3 and **, #
4. Outboard Valves	NA	R	NA	1, 2, 3 and **, #
5. Inboard Valves	NA	R	NA	1, 2, 3
6. Outboard Valves	NA	R	NA	1, 2, 3
7. Outboard Valve	NA	R	NA	1, 2, 3

\* Not required when all turbine stop valves are not full open.

\*\* When handling irradiated fuel in the secondary containment and during CORE ALTERATIONS and operations with a potential for draining the reactor vessel.

# During CORE ALTERATIONS and operations with a potential for draining the reactor vessel.

## INSTRUMENTATION

### BASES

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#### 3/4.3.1 REACTOR PROTECTION SYSTEM INSTRUMENTATION (Continued)

Functional Units, response time testing for the remaining channel components, including any analog trip units, is required. This allowance is supported by NEDO-32291-A, "System Analyses for the Elimination of Selected Response Time Testing Requirements," October 1995.

Response time may be demonstrated by any series of sequential, overlapping or total channel test measurement, provided such tests demonstrate the total channel response time as defined. Sensor response time verification may be demonstrated by either (1) in place, onsite or offsite test measurements, or (2) utilizing replacement sensors with certified response times.

#### 3/4.3.2 ISOLATION ACTUATION INSTRUMENTATION

This specification ensures the effectiveness of the instrumentation used to mitigate the consequences of accidents by prescribing the OPERABILITY trip setpoints and response times for isolation of the reactor systems. When necessary, one channel may be inoperable for brief intervals to conduct required surveillance. Both channels of each trip system for the main steam tunnel ventilation system differential temperature may be placed in an inoperable status for up to 4 hours for required reactor building ventilation system maintenance and testing and 12 hours due to loss of reactor building ventilation or for the required secondary containment Leak Rate test without placing the trip system in the tripped condition. This will allow for maintaining the reliability of the ventilation system and secondary containment. Specified surveillance intervals and surveillance and maintenance outage times have been determined in accordance with NEDC-30851P-A, Supplement 2, "Technical Specification Improvement Analyses for BWR Isolation Instrumentation Common to RPS and ECCS Instrumentation", March 1989, and with NEDC-31677P-A, "Technical Specification Improvement Analysis for BWR Isolation Actuation Instrumentation", July 1990. When a channel is placed in an inoperable status solely for performance of required surveillances, entry into LCO and required ACTIONS may be delayed, provided the associated function maintains primary containment isolation capability. Some of the trip settings may have tolerances explicitly stated where both the high and low values are critical and may have a substantial effect on safety. The setpoints of other instrumentation, where only the high or low end of the setting have a direct bearing on safety, are established at a level away from the normal operating range to prevent inadvertent actuation of the systems involved.

The Condenser Vacuum - Low Function isolates group 1 valves and is provided to prevent overpressurization of the main condenser in the event of a loss of the main condenser vacuum. Since the integrity of the condenser is an assumption in offsite dose calculations, the Condenser Vacuum - Low Function is assumed to be OPERABLE and capable of initiating closure of the MSIVs. The closure of the MSIVs is initiated to prevent the addition of steam that would

## INSTRUMENTATION

### BASES

#### 3/4.3.2 ISOLATION ACTUATION INSTRUMENTATION (Continued)

lead to additional condenser pressurization and possible rupture of the diaphragm installed to protect the turbine exhaust hood, thereby preventing a potential radiation leakage path following an accident.

As noted (footnote \* to Tables 3.3.2-1 and 4.3.2.1-1), the channels are not required to be OPERABLE in MODES 2 and 3, when all turbine stop valves (TSVs) are not full open, since the potential for condenser overpressurization is minimized. Switches are provided to manually bypass the channels when all TSVs are not full open. TSV position setpoints are controlled by TS 2.2.1 and surveillances are performed per TS 4.3.1. The TSV closure scram bypass below 30% power (TS Table 3.3.1-1, Note i) does not affect the TSV position interlocks for the condenser vacuum - low bypass logic.

Except for the MSIVs, the safety analysis does not address individual sensor response times or the response times of the logic systems to which the sensors are connected. For A.C. operated valves, it is assumed that the A.C. power supply is lost and is restored by startup of the emergency diesel generators. In this event, a time of 13 seconds is assumed before the valve starts to move. The safety analysis considers an allowable inventory loss which in turn determines the valve speed in conjunction with the 13 second delay.

For the sensors associated with MSIV isolation, instrumentation channels are not required to be response time tested. Response time testing for the remaining channel components, including any analog trip units, is required. This allowance is supported by NEDO-32291-A, "System Analyses for the Elimination of Selected Response Time Testing Requirements," October 1995.

#### 3/4.3.3 EMERGENCY CORE COOLING SYSTEM ACTUATION INSTRUMENTATION

The emergency core cooling system actuation instrumentation is provided to initiate actions to mitigate the consequences of accidents that are beyond the ability of the operator to control. This specification provides the OPERABILITY requirements, trip setpoints and response times that will ensure effectiveness of the systems to provide the design protection. Although the instruments are listed by system, in some cases the same instrument may be used to send the actuation signal to more than one system at the same time.

Per note #, the ECCS actuation instrument channels are not required to be response time tested. The overall ECCS response time requirement, which includes diesel generator injection valves, pumps, and other components, still applies. This allowance is supported by NEDO-32291-A, "System Analyses for the Elimination of Selected Response Time Testing Requirements," October 1995.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 124 TO FACILITY OPERATING LICENSE NO. NPF-11 AND  
AMENDMENT NO. 109 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 December 12, 1997, Commonwealth Edison Company (ComEd, the licensee) submitted a request for changes to the LaSalle County Station, Units 1 and 2, Technical Specifications (TS). The proposed changes would modify the bypass logic for Main Steam Line Isolation Valve (MSIV) Isolation Actuation Instrumentation on Condenser Low Vacuum as stated in Note \* of TS Tables 3.3.2-1 and 4.3.2-1. TS 3.3.2 states that the Condenser Vacuum - Low trip function is applicable in Modes 1, 2, and 3, but may be bypassed in Modes 2 and 3 with reactor steam pressure  $\leq$  1043 psig and all turbine stop valves closed. The purpose of automatic closure of the MSIVs when condenser vacuum is low is to prevent overpressurization of the main condenser. Closure of the MSIVs prevents the addition of steam that would lead to additional condenser pressurization and possible rupture, thereby preventing a potential radiation leakage path following an accident. This automatic action can be bypassed by a manual switch under the following conditions: (1) the reactor Mode switch is not in the run position, (2) all turbine stop valves are closed, and (3) all four channels of reactor vessel steam dome pressure switches are  $\leq$  1043 psig.

2.0 EVALUATION

The bypass interlock associated with reactor vessel steam dome pressure was included in the original design of LaSalle and was based on experience at a European BWR1 in the 1960's where difficulty was encountered in controlling reactor power above a specified pressure without pressure control. Subsequent testing at a US facility indicated that this condition was not experienced at that site and General Electric modified the design of all BWR plants to either increase the pressure trip point to the high pressure scram setpoint or remove all circuits associated with the Hot Standby pressure trip. LaSalle implemented the first option and increased the pressure trip point to 1043 psig, the scram setpoint for reactor vessel steam pressure - high. LaSalle now proposes to implement the second option and remove all circuits associated with this bypass interlock and delete the TS requirement.

The current setpoint of 1043 psig renders this interlock essentially ineffective. If reactor vessel pressure exceeds 1043 psig, an automatic scram will occur and the plant will be in a condition in which the automatic isolation on Condenser Vacuum - Low is not applicable. The remaining interlocks will ensure that this function is not bypassed in an inappropriate condition. The requirement that the function be operable during Mode 1 and during Modes 2 and 3 with the turbine stop valves (TSVs) open will ensure that an MSIV isolation will occur on low condenser vacuum in those conditions that could result in damage to the condenser. Because the interlock related to reactor vessel pressure is not necessary for safety of the plant, its deletion is acceptable.

The current TS state that the function may be bypassed with all TSVs closed in Modes 2 and 3. The licensee proposes to revise the wording from "closed" to "not full open" based on the actual logic. The instruments that measure closure of the TSVs are set to actuate certain actions, including isolation bypass on less than or equal to 5 percent closed. The same instruments are used to actuate the Reactor Protection System when the turbine stop valves begin to close. TS 2.2.1 specifies a setpoint for TSV closure trip of less than or equal to 5% closed to initiate actions required upon closure of the TSVs. TS 4.3.1 requires verification of this setpoint through surveillances.

The current surveillance requirement for channel calibration and functional tests of the condenser vacuum - low isolation instrumentation in Table 4.3.2.1-1 is modified by a footnote that explains that the surveillance is required in Modes 2 and 3 when reactor steam pressure is greater than 1043 psig and/or any turbine stop valve is open. The licensee has proposed rewording this footnote to be consistent with the footnote in Table 3.3.2-1 to state that the surveillance is not required when all turbine stop valves are not full open. When all TSVs are not full open, all channels can be bypassed in which case the trip function is not active. The proposed footnote also deletes reference to the reactor steam pressure interlock, as discussed above. The proposed footnote is consistent with the footnote used in Table 3.3.2-1, "Isolation Actuation Instrumentation" and is an accurate representation of the trip logic. Therefore, the proposed change is acceptable.

### 3.0 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.

### 4.0 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 (63 FR 6982). 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.

### 5.0 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: D. Skay

Date: April 14, 1998