

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

COMMONWEALTH EDISON COMPANY

## DOCKET NO. 50-373

# LA SALLE COUNTY STATION, UNIT 1

## AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 30 License No. NPF-11

- The Nuclear Regulatory Commission (the Commission or the NRC) having found that:
  - A. The application for amendment filed by the Commonwealth Edison Company, dated August 28, 1985, 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 1;
  - 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.
- Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment and paragraph 2.C.(2) of 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. 30 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.

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FOR THE NUCLEAR REGULATORY COMMISSION

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Walter R. Butler, Chief Licensing Branch No. 2 Division of Licensing

Enclosure: Changes to the Technical Specifications

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Date of Issuance: MON 20 1985

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# ENCLOSURE TO LICENSE AMENDMENT NO. 30 FACILITY CFERATING 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 vertical lines indicating the area of change.

REMOVE	INSERT
3/4 2-3	3/4 2-3
3/4 3-1	3/4 3-1
3/4 3-5	3/4 3-5
3/4 3-8	3/4 3-8

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# 3/4.2.2 APRM SETPOINTS

# LIMITING CONDITION FOR OPERATION

3.2.2 The APRM flow biased simulated thermal power-upscale scram trip setpoint (S) and flow biased simulated thermal power-upscale control rod block trip setpoint (S<sub>PB</sub>) shall be established according to the following relationships:

- Two Recirculation Loop Operation a. S less than or equal to (0.66W + 51%)T  $S_{pp}$  less than or equal to (0.66W + 42%)T
- Single Recirculation Loop Operation b. S less than or equal to (0.66W + 45.7%)T  $S_{pg}$  less than or equal to (0.66W + 36.7%)T
- where:
- S and  $S_{RB}$  are in percent of RATED THERMAL POWER, W = Loop recirculation flow as a percentage of the loop recirculation flow which produces a rated core flow of 108.5 million lbs/hr,
  - T = Lowest value of the ratio of FRACTION OF RATED THERMAL POWER divided by the MAXIMUM FRACTION OF LIMITING POWER DENSITY. T is always less than or equal to 1.0.

APPLICABILITY: OPERATIONAL CONDITION 1, when THERMAL POWER is greater than or equal to 25% of RATED THERMAL POWER.

## ACTION:

With the APRM flow biased simulated thermal power-upscale scram trip setpoint and/or the flow biased simulated thermal power-upscale control rod block trip setpoint set less conservatively than S or  $S_{PB}$ , as above determined, initiate corrective action within 15 minutes and restore S and/or  $S_{RB}$  to within the required limits\* within 2 hours or reduce THERMAL POWER to Tess than 25% of RATED THERMAL POWER within the next 4 hours.

# SURVEILLANCE REQUIREMENTS

4.2.2 The FRTP and the MFLPD for each class of fuel shall be determined, the value of T calculated, and the most recent actual APRM flow biased simulated thermal power-upscale scram and control rod block trip setpoint verified to be within the above limits or adjusted, as required:

- a. At least once per 24 hours,
- Within 12 hours after completion of a THERMAL POWER increase of at b. least 15% of RATED THERMAL POWER, and
- Initially and at least once per 12 hours when the reactor is operating C. with MFLPD greater than or equal to FRTP.

\*With MFLPD greater than the FRTP up to 90% of RATED THERMAL POWER, rather than adjusting the APRM setpoints, the APRM gain may be adjusted such that APRM readings are greater than or equal to 100% times MFLPD, provided that the adjusted APRN reading does not exceed 100% of RATED THERMAL POWER, the required gain adjustment increment does not exceed 10% of RATED THERMAL POWER, and a notice of the adjustment is posted on the reactor control panel.

LA SALLE UNIT 1

# 3/4.3 INSTRUMENTATION

# 3/4.3.1 REACTOR PROTECTION SYSTEM INSTRUMENTATION

# LIMITING CONDITION FOR OPERATION

3.3.1 As a minimum, the reactor protection system instrumentation channels shown in Table 3.3.1-1 shall be OPERABLE with the REACTOR PROTECTION SYSTEM RESPONSE TIME as shown in Table 3.3.1-2.

APPLICABILITY: As shown in Table 3.3.1-1.

## ACTION:

- a. With the number of OPERABLE channels less than required by the Minimum OPERABLE Channels per Trip System requirement for one trip system, place the inoperable channels and/or trip system in the tripped condition\* within 1 hour. The provisions of Specification 3.0.4 are not applicable.
- b. With the the number of OPERABLE channels less than required by the Minimum OPERABLE Channels per Trip System requirement for both trip systems, place at least one trip system\*\* in the tripped condition within 1 hour and take the ACTION required by Table 3.3.1-1.

# SURVEILLANCE REQUIREMENTS

4.3.1.1 Each reactor protection system instrumentation channel shall be demonstrated OPERABLE by the performance of the CHANNEL CHECK, CHANNEL FUNCTIONAL TEST and CHANNEL CALIBRATION operations for the OPERATIONAL CONDITIONS and at the frequencies shown in Table 4.3.1.1 1.

4.3.1.2 LOGIC SYSTEM FUNCTIONAL TESTS and simulated automatic operation of all channels shall be performed at least once per 18 months.\*\*\*

4.3.1.3 The REACTOR PROTECTION SYSTEM RESPONSE TIME of each reactor trip functional unit shown in Table 3.3.1-2 shall be demonstrated to be within its limit at least once per 18 months. Each test shall include at least one channel per trip system such that all channels are tested at least once every N times 18 months where N is the total number of redundant channels in a specific reactor trip system.

With a design providing only one channel per trip system, an inoperable channel need not be placed in the tripped condition where this would cause the Trip Function to occur. In these cases, the inoperable channel shall be restored to OPERABLE status within 2 hours or the ACTION required by Table 3.3.1-1 for that Trip Function shall be taken.

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If more channels are inoperable in one trip system than in the other, select that trip system to place in the tripped condition, except when this would cause the Trip Function to occur.

\*\*\*The specified 18-month interval may be waived for Cycle 1 provided the surveillance is performed during Refuel 1, which is to commence no later than October 27, 1985.

LA SALLE - UNIT 1

## 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 2 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) The "shorting links" shall be removed from the RPS circuitry prior to and during the time any control rod is withdrawn\* and during shutdown margin demonstrations performed per Specification 3.10.3.
- (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 be automatically bypassed when turbine first stage pressure is < 140 psig, equivalent to THERMAL POWER less than 30% of RATED THERMAL POWER.
- (j) Also actuates the EOC-RPT system.

\*Not required for control rods removed per Specifications 3.9.10.1 or 3.9.10.2.

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FUNCTIONAL UNIT		CHANNEL	CHANNEL FUNCTIONAL TEST	CHANNEL	OPERATIONAL CONDITIONS FOR WHICH SURVEILLANCE REQUIRED
8.	Scram Discharge Volume Water Level - High	NA	м	R	1, 2, 5
9.	Turbine Stop Valve - Closure	NA	м	R	1
10.	Turbine Control Valve Fast Closure Valve Trip System O Pressure - Low	)il NA	м	R*	1
11.	Reactor Mode Switch Shutdown Position	NA	R	NA	1, 2, 3, 4, 5
12.	Manual Scram	NA	м	NA	1, 2, 3, 4, 5

TABLE 4.3.1.1-1 (Continued) REACTOR PROTECTION SYSTEM INSTRUMENTATION SURVEILLANCE REQUIREMENTS

(a) Neutron detectors may be excluded from CHANNEL CALIBRATION.

- (b) The IRM, and SRM channels shall be determined to overlap for at least 1/2 decades during each startup and the IRM and APRM channels shall be determined to overlap for at least 1/2 decades during each controlled shutdown, if not performed within the previous 7 days.
- (c) Within 24 hours prior to startup, if not performed within the previous 7 days.
- (d) This calibration shall consist of the adjustment of the APRM channel to conform to the power levels calculated by a heat balance during OPERATIONAL CONDITION 1 when THERMAL POWER > 25% of RATED THERMAL POWER. The APRM Gain Adjustment Factor (GAF) for any channel shall be equal to the power value determined by the heat balance divided by the APRM reading for that channel.

Within 2 hours, adjust any APRM channel with a GAF > 1.02. In addition, adjust any APRM channel within 12 hours, (1) if power is greater than or equal to 90% of RATED THERMAL POWER and the APRM channel GAF is < 0.98, or (2) if power is less than 90% of RATED THERMAL POWER and the APRM reading exceeds the power value determined by the heat balance by more than 10% of RATED THERMAL POWER. Until any required APRM adjustment has been accomplished, notification shall be posted on the reactor control panel.

- (e) This calibration shall consist of the adjustment of the APRM flow biased channel to conform to a calibrated flow signal.
- (f) The LPRMs shall be calibrated at least once per 1000 effective full power hours (EFPH) using the TIP system.
- (g) Measure and compare core flow to rated core flow.
- (h) This calibration shall consist of verifying the 6 ± 1 second simulated thermal power time constant.

LA SALLE - UNIT 1

<sup>\*</sup>The specified 18-month interval may be waived for Cycle 1 provided the surveillance is performed during Refuel 1, which is to commence no later than October 27, 1985.



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

## COMMONWEALTH EDISON COMPANY.

## DOCKET NO. 50-374

## LA SALLE COUNTY STATION, UNIT 2

## AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 17 License No. NPF-18

- The Nuclear Regulatory Commission (the Commission or the NRC) having found that:
  - A. The application for amendment filed by the Commonwealth Edison Company, dated August 28, 1985, 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.
- Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment and paragraph 2.C.(2) of 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 Nc. 17 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 amendment is effective as of date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

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Walter R. Butler, Chief Licensing Branch No. 2 Division of Licensing

Enclosure: Changes to the Technical Specifications

Date of Issuance: NOV 2 0 1985

# ENCLOSURE TO LICENSE AMENDMENT NO. 17 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 vertical lines indicating the area of change.

REM	DVE	INS	INSERT		
3/4	2-3	3/4	1 2-3		
3/4	3-1	3/4	3-1		
3/4	3-5	3/4	3-5		
3/4	3-8	3/4	3-8		

# POWER DISTRIBUTION LIMITS

## 3/4.2.2 APRM SETPOINTS

#### LIMITING CONDITION FOR OPERATION

3.2.2 The APRM flow biased simulated thermal power-upscale scram trip setpoint (S) and flow biased simulated thermal power-upscale control rod block trip setpoint ( $S_{RB}$ ) shall be established according to the following relationships:

a. Two Recirculation Loop Operation

S less than or equal to (0.66W + 51%)T

 $S_{pp}$  less than or equal to (0.66W + 42%)T

b. Single Recirculation Loop Operation

S less than or equal to (0.66W + 45.7%)T

 $S_{pp}$  less than or equal to (0.66W + 36.7%)T

where: S and S<sub>RB</sub> are in percent of RATED THERMAL POWER,

- W = Loop recirculation flow as a percentage of the loop recirculation flow which produces a rated core flow of 108.5 million lbs/hr,
- T = Lowest value of the ratio of FRACTION OF RATED THERMAL POWER divided by the MAXIMUM FRACTION OF LIMITING POWER DENSITY. T is always less than or equal to 1.

APPLICABILITY: OPERATIONAL CONDITION 1, when THERMAL POWER is greater than or equal to 25% of RATED THERMAL POWER.

## ACTION:

With the APRM flow biased simulated thermal power-upscale scram trip setpoint and/or the flow biased simulated thermal power-upscale control rod block trip setpoint set less conservatively than S or  $S_{RB}$ , as above determined, initiate corrective action within 15 minutes and restore S and/or  $S_{RB}$  to within the required limits\* within 2 hours or reduce THERMAL POWER to Tess than 25% of RATED THERMAL POWER within the next 4 hours.

### SURVEILLANCE REQUIREMENTS

4.2.2 The FRTP and the MFLPD for each class of fuel shall be determined, the value of T calculated, and the most recent actual APRM flow biased simulated thermal power-upscale scram and control rod block trip setpoint verified to be within the above limits or adjusted, as required:

- a. At least once per 24 hours,
- b. Within 12 hours after completion of a THERMAL POWER increase of at least 15% of RATED THERMAL POWER, and
- c. Initially and at least once per 12 hours when the reactor is operating with MFLPD greater than or equal to FRTP.

\*With MFLPD greater than the FRTP up to 90% of RATED THERMAL POWER, rather than adjusting the APRM setpoints, the APRM gain may be adjusted such that APRM readings are greater than or equal to 100% times MFLPD, provided that the adjusted APRM reading does not exceed 100% of RATED THERMAL POWER, the required gain adjustment increment does not exceed 10% of RATED THERMAL POWER, and a notice of the adjustment is posted on the reactor control panel.

LA SALLE - UNIT 2

Amendment No. 17

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## 3/4.3 INSTRUMENTATION

# 3/4.3.1 REACTOR PROTECTION SYSTEM INSTRUMENTATION

# LIMITING CONDITION FOR OPERATION

3.3.1 As a minimum, the reactor protection system instrumentation channels shown in Table 3.3.1-1 shall be OPERABLE with the REACTOR PROTECTION SYSTEM RESPONSE TIME as shown in Table 3.3.1-2.

APPLICABILITY: As shown in Table 3.3.1-1.

ACTION:

- a. With the number of OPERABLE channels less than required by the Minimum OPERABLE Channels per Trip System requirement for one trip system, place the inoperable channels and/or trip system in the tripped con dition\* within 1 hour. The provisions of Specification 3.0.4 are not applicable.
- b. With the the number of OPERABLE channels less than required by the Minimum OPERABLE Channels per Trip System requirement for both trip systems, place at least one trip system\*\* in the tripped condition within 1 hour and take the ACTION required by Table 3.3.1-1.

# SURVEILLANCE REQUIREMENTS

4.3.1.1 Each reactor protection system instrumentation channel shall be demonstrated OPERABLE by the performance of the CHANNEL CHECK, CHANNEL FUNCTIONAL TEST, and CHANNEL CALIBRATION operations for the OPERATIONAL CONDITIONS and at the frequencies shown in Table 4.3.1.1-1.

4.3.1.2 LOGIC SYSTEM FUNCTIONAL TESTS and simulated automatic operation of all channels shall be performed at least once per 18 months.

4.3.1.3 The REACTOR PROTECTION SYSTEM RESPONSE TIME of each reactor trip functional unit shown in Table 3.3.1-2 shall be demonstrated to be within its limit at least once per 18 months. Each test shall include at least one channel per trip system such that all channels are tested at least once every N times 18 months where N is the total number of redundant channels in a specific reactor trip system.

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<sup>\*</sup>With a design providing only one channel per trip system, an inoperable channel need not be placed in the tripped condition where this would cause the Trip Function to occur. In these cases, the inoperable channel shall be restored to OPERABLE status within 2 hours or the ACTION required by Table 3.3.1-1 for that Trip Function shall be taken.

<sup>\*\*</sup>If more channels are inoperable in one trip system than in the other, select that trip system to place in the tripped condition, exc. when this would cause the Trip Function to occur.

### 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 2 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) The "shorting links" shall be removed from the RPS circuitry prior to and during the time any control rod is withdrawn\* and during shutdown margin demonstrations performed per Specification 3.10.3.
- (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 be automatically bypassed when turbine first stage pressure is ≤ 140 psig, equivalent to THERMAL POWER less than 30% of RATED THERMAL POWER.
- (j) Also actuates the EOC-RPT system.

\*Not required for control rods removed per Specification 3.9.10.1 or 3.9.10.2.

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	REACTOR PROTECTION SYSTEM INSTRUMENTATION SURVEILLANCE REQUIREMENTS					
FUNCTIONAL UNIT		CHANNEL	CHANNEL FUNCTIONAL TEST	CHANNEL CALIBRATION	OPERATIONAL CONDITIONS FOR WHICH SURVEILLANCE REQUIRED	
8.	Scram Discharge Volume Water Level - High	NA	м	R	1, 2, 5	
9.	Turbine Stop Valve - Closure	NA	м	R	1	
10.	Turbine Control Valve Fast Closure Valve Trip System O Pressure - Low	NA NA	м	R	1	
11.	Reactor Mode Switch Shutdown Position	NA	R	NA	1, 2, 3, 4, 5	
12.	Manual Scram	NA	м	NA	1, 2, 3, 4, 5	
13.	Control Rod Drive a. Charging Water Heade					
	Pressure - Low	NA	M	R	2, 5	
	b. Delay limer	NA	M	R	2.5	

## TABLE 4.3.1.1-1 (Continued)

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(a) Neutron detectors may be excluded from CHANNEL CALIBRATION.

(b) The IRM, and SRM channels shall be determined to overlap for at least 1/2 decades during each startup and the IRM and APRM channels shall be determined to overlap for at least 1/2 decades during each controlled shutdown, if not performed within the previous 7 days.

(c) Within 24 hours prior to startup, if not performed within the previous 7 days.

(d) This calibration shall consist of the adjustment of the APRM channel to conform to the power levels calculated by a heat balance during DPERATIONAL CONDITION 1 when THERMAL POWER > 25% of RATED THERMAL POWER. The APRM Gain Adjustment Factor (GAF) for any channel shall be equal to the power value determined by the heat balance divided by the APRM reading for that channel.

Within 2 hours, adjust any APRM channel with a GAF > 1.02. In addition, adjust any APRM channel within 12 hours, (1) if power is greater than or equal to 90% of RATED THERMAL POWER and the APRM channel GAF is < 0.98, or (2) it power is less than 90% of RATED THERMAL POWER and the APRM reading exceeds the power value determined by the heat balance by more than 10% of RATED THERMAL POWER. Until any required APRM adjustment has been accomplished. notification shall be posted on the reactor control panel.

(e) This calibration shall consist of the adjustment of the APRM flow biased channel to conform to a calibrated flow signal.

(f) The LPRMs shall be calibrated at least once per 1000 effective full power hours (EFPH) using the TIP system.

(g) Measure and compare core flow to rated core flow.

(h) This calibration shall consist of verifying the  $6 \pm 1$  second simulated thermal power time constant.

Amendment No.