

#### COMMONWEALTH EDISON COMPANY

#### DOCKET NU. STN 50-454

### BYRON STATION, UNIT NO. 1

## AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 48 License No. NPF-37

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Commonwealth Edison Company (the licensee) dated November 6, 1987, as supplemented by letters dated February 8, 1991, January 13 and February 6, 1992, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules and 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 rules and 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;
  - 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-37 is hereby amended to read as follows:

The Technical Specifications contained in Appendix A as revised through Amendment No. 48 and the Environmental Protection Plan contained in Appendix B, both of which are attached hereto, are hereby incorporated into this 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.

FOR THE NUCLEAP REGULATORY COMMISSION

Richard J. Barrett, Director Project Directorate III-2 Division of Reactor Projects - III/IV/V Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical Specifications



COMMONWEALTH EDISON COMPANY

#### DOCKET NO. STN 50-455

## BYRON STATION, UNIT NO. 2

# AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 48 License No. NPF-66

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Commonwealth Edison Company (the licersee) dated November 6, 1987, as supplemented by letters dated February 8, 1991, January 13 and February 6, 1992, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules and 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 rules and 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;
  - 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-66 is hereby amended to read as follows:

The Technical Specifications contained in Appendix A (NUREG-1113), as revised through Amendment No. 48 and revised by Attachment 2 to NPF-66, and the Environmental Protection Plan contained in Appendix B, both of which were attached to License No. NPF-37, dated February 14, 1985, are hereby incorporated into this license. Attachment 2 contains a revision to Appendix A which is hereby incorporated into this 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.

FOR THE NUCLEAR REGULATORY COMMISSION

and

Richard Ø. Barrett, Director Project Directorate III-2 Division of Reactor Projects - III/IV/V Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical Specifications

# ATTACHMENT TO LICENSE AMENDMENT NOS. 48 AND 48

# FACILITY OPERATING LICENSE NOS. Nº5-37 AND NPF-66

# DOCKET NOS. STN 50-454 ANJ STN 50-455

Revise the Appendix A Technical Specifications by removing the pages identified below and inserting the attached pages. The revised pages are identified by the captioned amendment number and contain marginal lines indicating the area of change. Overleaf pages identified by an asterisk are provided for convenience.

Remove Pages	Insert Pages			
3/4 3-39*	3/4 3-39*			
3/4 3-40	3/4 3-40			
3,4 3-41	3/4 3-41			
3/4 3-42	3/4 3-42			

#### INSTRUMENTATION

3/4.3.3 MONITORING INSTRUMENTATION

RADIATION MUNITORING FOR PLANT OPERATIONS

## LIMITING CONDITION FOR OPERATION

3.3.3.1 The radiation monitoring instrumentation channels for plant operations shown in Table 3.3-6 shall be OPERABLE with their Alarm/Trip Setpoints within the specified limits.

APPLICABILITY: As shown in Table 3.3-6.

ACTION:

- a. With a radiation monitoring channel Alarm/Trip Setpoint for plant operations exceeding the value shown in Table 3.3-6, adjust the Setpoint to within the limit within 4 hours or declare the channel inoperable.
- b. With one or more radiation monitoring channels for plant operations inoperable, take the ACTION shown in Table 3.3-6.
- c. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.3.3.1 Each radiation monitoring instrumentation channel for plant operations shall be demonstrated OPERABLE by the performance of the CHANNEL CHECK, CHANNEL CALIBRATION and DIGITAL CHANNEL OPERATIONAL TEST for the MODES and at the frequencies shown in Table 4.3-3.

BYRON - UNITS 1 & 2

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# TABLE 3.3-6

# RADIATION MONITORING INSTRUMENTATION FOR PLANT OFERATIONS

FUNCTIONAL UNIT		CHANNELS TO TRIP/ALARM	MINIMUM CHANNELS OPERABLE	APPLICABLE MODES	ALARM/TRIP SETPOINT	ACTION
1.	Fuel Building Isolation- Radioactivity-High and Criticality (ORE-AR055/56)	1	2	×	<u>&lt;</u> 5 mR/h	29
2.	Containment Isolation- Containment Radioactivity- High a) Unit 1 (1RE-AR011/12)	1	2	A11	**	26
3.	b) Unit 2 (2RE-AR011/12)	1	2	A11	**	26
э.	Gaseous Radioactivity- RCS Leakage Detection a) Unit 1 (1RE-PR011B) b) Unit 2 (2RE-PR011B)	N. A. N. A.	1 1	1, 2, 3, 4 1, 2, 3, 4		28 28
4.	Particulate Radioactivity- RCS Leakage Detection a) Unit 1 (1RE-PR011A) b) Unit 2 (2RE-PR011A)	N.A. N.A.	1	1, 2, 3, 4 1, 2, 3, 4		28 28
5.	Main Control Room Isolatica- Outside Air Intake-Gaseous Radioactivity-High					
	a) Train A (ORE-PRGJ.3/32B) b) Train B (ORE-PRO33B/34B)	1 1	2 2	A11 A11	< 2 mR/h < 2 mR/h	27 27

BYRON - UNITS 1 & 2

## TABLE NOTATIONS

\*With new fucl or irradiated fuel in the fuel storage areas or fuel building.

\*\*Trip Setpoint is to be established such that the actual submersion dose rate would not exceed 10 mR/hr in the containment building. For containment purge or vent the Setpoint value may be increased up to twice the maximum concentration activity in the containment determined by the sample analysis performed prior to each release in accordance with Table 4.11-2 provided the value does not exceed 10% of the equivalent limits of Specification 3.11.2.1.a in accordance with the methodology and parameters in the ODCM.

#### ACTION STATEMENTS

- ACTION 26 With less than the Minimum Channels OPERABLE requirement, operation may continue provided the containment purge valves are maintained closed.
- ACTION 27 With the number of OPERABLE channels less than the Minimum Channels OPERABLE requirement, within 1 hour switch to the redundant train of Control Room Ventilation, provided the redundant train meets the Minimum Channels OPERABLE requirement or isolate the Control Room Ventilation System and initiate operation of the Control Room Make-up System. Restore the inoperable monitors to OPERABLE status within 30 days or submit a Special Report to the Commission pursuant to Specification 6.9.2 within the following 30 days that provides the cause of the inoperability and the plans for restoration.
- ACTION 28 Must satisfy the ACTION requirement for Specification 3.4.6.1.
- ACTION 29 With the number of OPERABLE channels one less than the Minimum Channels OPERABLE requirement, ACTION a. of Specification 3.9.12 must be satisfied. With both channels inoperable, provide an appropriate portable continuous monitor with the same Alarm Setpoint in the fuel pool area with one Fuel Handling Building Exhaust filter plenum in operation. Otherwise satisfy ACTION b. of Specification 3.9.12.

## TABLE 4.3-3

## RADIATION MONITORING INSTRUMENTATION FOR PLANT OPERATIONS SURVEILLANCE REQUIREMENTS

11TS 1 & 2	FUI	NCTIONAL UNIT	CHANNEL CHECK	CHANNEL CALIBRATION	DIGITAL CHANNEL OPERATIONAL TEST	MODES FOR WHICH SURVEILLANCE IS REQUIRED
	1.	Fuel Building Isolation- Radioactivity-High and Criticality (ORE-AR055/56)	s	R	м	*
	2.	Containment Isolation- Containment Radioactivity- High				
3/4		a) Unit 1 (1RE-AR011/12)	S	R R	M	A11
3-00		b) Unit 2 (2RE-AR011/12)	3	ĸ	M	A11
22	3.	Gaseous Radioactivity- RCS Leakage Detection				
		a) Unit 1 (1RE-PR011B)	S	R	M	1, 2, 3, 4
		b) Unit 2 (2RE-PR011B)	S	R	М	1, 2, 3, 4
	4.	Particulate Radioactivity- RCS Leakage Detection				
		a) Unit 1 (1RE-PRO11A)	S	R	М	1, 2, 3, 4
		b) Unit 2 (2RE-PR011A)	S	R	М	1, 2, 3, 4
AMENDMENT	5.	M.in Control Room Isolation- Outside Air Intake-Gaseous Radioactivity-High				
2		a) Train A (ORE-PR031B/32B)	S	R	M	A11
ET.		b) Train B (ORE-PP033B/34B)	S	R	M	A11

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"With new fuel or irradiated fuel in the fuel storage areas or fuel building.

BYRON - UNITS 1 &



#### COMMONWEALTH EDISON COMPANY

#### DOCKET NO. STN 50-456

#### BRAIDWOOD STATION, UNIT NO. 1

## AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 37 License No. NPF-72

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Commonwealth Edison Company (the licensee) dated November 6, 1987, as supplemented by letters dated February 8, 1991, January 13 and February 6, 1992, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules and 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 rules and 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;
  - 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-72 is hereby amended to read as follows:

The Technical Specifications contained in Appendix A as revised through Amendment no. 37 and the Environmental Protection Plan contained in Appendix B, both of which are attached hereto, are hereby incorporated into this 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.

FOR THE NUCLEAR REGULATORY COMMISSION

Richard Ø. Barrett, Director Project Directorate III-2 Division of Reactor Projects - III/IV/V Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical Specifications



#### COMMONWEALTH EDISON COMPANY

#### DOCKET NO. STN 50-457

#### BRAIDWOOD STATION, UNIT NO. 2

## AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 37 License No. NPF-77

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Commonwealth Edison Company (the licensee) dated November 6, 1987, as supplemented by letters dated February 8, 1991, January 13 and February 6, 1992, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules and 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 rules and 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;
  - 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-77 is hereby amended to read as follows:

The Technical Specifications contained in Appendix A as revised through Amendment No. 37 and the Environmental Protection Plan contained in Appendix B, both of which were attached to License No. NPF-72, dated July 2, 1987, are hereby incorporated into this license. The licensee shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

is license amendment is effective as of the date if its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Richard Ø. Barrett, Director Project Directorate III-2 Division of Reactor Projects - III/IV/V Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical Specifications

3.

## ATTACHMENT TO LICENSE AMENDMENT NOS. 37 AND 37

# FACILITY OPERATING LICENSE NOS. NPF-72 AND NPF-77

# DOCKET NOS. STN 50-456 AND STN 50-457

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

Remove Pages	Insert Pages			
3/4 3-39	3/4 3-39			
3/4 3-40	3/4 3-40			
3/4 3-41	3/4 3-41			
3/4 3-42	3/4 3-42			

## INSTRUMENTATION

3/4.3.3 MONITORING INSTRUMENTATION

RADIATION MONITORING FOR PLANT OPERATIONS

#### LIMITING CONDITION FOR OPERATION

3.3.3.1 The radiation monitoring instrumentation channels for plant operations shown in Table 3.3-6 shall be OPERABLE with their Alarm/Trip Setpoints within the specified limits.

APPLICABILITY: As shown in Table 3 3-6.

ACTION:

- a. With a radiation monitoring channel Alarm/Trip Setpoint for plant operations exceeding the value shown in Table 3.3-6, adjust the Setpoint to within the limit within 4 hours or declare the channel inoperable.
- b. With one or more radiation monitoring channels for plant operations inoperable, take the ACTION shown in Table 3.3-6.
- c. The provisions of Specification 3.0.3 and 3.0.4 are not applicable.

#### SURVEILLANCE REQUIREMENTS

4.3.3.1 Each radiation monitoring instrumentation channel for plant operations shall be demonstrated OPERABLE by the performance of the CHANNEL CHECK, CHANNEL CALIBRATION and DIGITAL CHANNEL OPERATIONAL TEST for the MODES and at the frequencies shown in Table 4.3-3.

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## RADIATION MONITORING INSTRUMENTATION FOR PLANT OPERATIONS

FU	INCTIONAL UNIT	CHANNELS TO TRIP/. JAKM	MINIMUM CHANNELS OPERABLE	APPLICABLE MODES	ALARM/TRIP SETPOINT	ACTION
1.	Fuel Building Isolation- Radioactivity-High and Criticality (ORE-AR055/56)	1	2	*	<5 mR/h.	29
2.	Containment Isolation- Containment Radioactivity- High a) Unit 1 (1RE-AR011/12) b) Unit 2 (2RE-AR011/12)	1	2	A11 A11	** **	26 26
3.	김 일이 한 것이 같은 것이 가지? 것이 같이 했다.	N.A. N.A.	1	1. 2, 3, 4 ., 2, 3, 4		28 28
4.	Particulate Radioactivity- RCS Leakage Detection a) Unit 1 (1RE-PR011A) b) Unit 2 (2RE-PR011A)	N.A. N.A.	1 1	1, 2, 3, 4 1, 2, 3, 4	N.A. N.A.	28 28
5.	Main Control Room Isolation- Outside Air Intake-Gaseous Radioactivity-High a) Train A (ORE-PR031B/32B) b) Train B (ORE-PR033B/34B)	1 1	2 2	A11 A17	< 2 mR/h ≤ 2 mR/h	27 27

BRAIDWOOD - UNITS 1 & 2

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AMENDMENT NO. 37

#### TABLE NOTATIONS

\*With new fuel or irradiated fuel in the fuel storage areas or fuel building.

\*\*Trip Setpoint is to be established such that the actual submersion dose rate would not exceed 10 mR/hr in the containment building. For containment purge or vent the Setpoint value may be increased up to twice the maximum concentration activity in the containment determined by the sample analysis performed prior to each release in accordance with Table 4.11-2 provided the value does not exceed 10% of the equivalent limits of Specification 3.11.2.1.a in accordance with the methodology and parameters in the ODCM.

#### ACTION STATEMENTS

- ACTION 26 With less than the Minimum Channels OPERABLE requirement, operation may continue provided the containment purge valves are maintained closed.
- ACTION 27 With the number of OPERABLE channels less than the Minimum Channels OPERABLE requirement, within 1 hour switch to the redundant train of Control Room Ventilation, provided the redundant train meets the Minimum Channels OPERABLE requirement or isolate the Control Room Ventilation System and initiate operation of the Control Room Makerup System. Restore the inoperable monitors to OPERABLE status within 30 days or submit a Special Report to the Commission pursuant to Specification 6.9.2 within the following 30 days that provides the cause of the inoperability and the plans for restoration.
- ACTION 28 Must satisfy the ACTION requirement for Specification 3.4.6.1.
- ACTION 29 With the number of OPERABLE channels one less than the Minimum Channels OPERABLE requirement, ACTION a. of Specification 3.9.12 must be satisfied. With both channels inoperable, provide an appropriate portable continuous monitor with the same Alarm Setpoint in the fuel pool area with one Fuel Handling Building Exhaust filter plenum in operation. Otherwise satisfy ACTION b. of Specification 3.9.12.

## TABLE 4.3-3

## RADIATION MONITORING INSTRUMENTATION FOR PLANT OPERATIONS SURVEILLANCE REQUIREMENTS

FUN			CHANNEL CALIBRATION	DIGITAL CHANNEL OPERATIONAL TEST	MODES FOR WHICH SURVEILLANCE IS REQUIRED	
1.	Fuel Building Isolation- Radioactivity-High and Criticality (ORE-AR055/56)	5	R	Ľ	*	
2.	Containment Radioactivity- High					
		S	R	M	A11 A11	
3.		S S	R R	M M	1, 2, 3, 4 1, 2, 3, 4	
4.	Particulate Radioactivity- RCS Leakage Detection a) Unit 1 (1RE-PRO11A) b) Unit 2 (2RE-PRO11A)	S S	R R	M M	1, 2, 3, 4 1, 2, 3, 4	
5.	Main Control Room Isolation- Outside Air Intake-Gaseous Radioactivity-High a) Train A (ORE-PRO31B/32B) b) Train B (ORE-PRO33B/34B)	S S	R R	M M	A11 A11	
	1. 2. 3.	<ul> <li>Criticality (ORE-AR055/56)</li> <li>2. Containment Isolation- Containment Radioactivity- High <ul> <li>a) Unit 1 (IRE-AR011/12)</li> <li>b) Unit 2 (2RE-AR011/12)</li> </ul> </li> <li>3. Gaseous Radioactivity- RCS Leakage Detection <ul> <li>a) Unit 1 (IRE-PR011B)</li> <li>b) Unit 2 (2RE-PR011B)</li> </ul> </li> <li>4. Particulate Radioactivity- RCS Leakage Detection <ul> <li>a) Unit 1 (IRE-PR011B)</li> <li>b) Unit 2 (2RE-PR011A)</li> <li>b) Unit 2 (2RE-PR011A)</li> <li>b) Unit 2 (2RE-PR011A)</li> </ul> </li> <li>5. Main Control Room Isolation- Outside Air Intake-Gaseous Radioactivity-High <ul> <li>a) Train A (ORE-PR031B/32B)</li> </ul> </li> </ul>	FUNCTIONAL UNITCHECK1. Fuel Building Isolation- Radioactivity-High and Criticality (ORE-AR055/56)S2. Containment Isolation- Containment Radioactivity- High a) Unit 1 (IRE-AR011/12)S3. Gaseous Radioactivity- RCS Leakage Detection a) Unit 1 (IRE-PR011B)S3. Gaseous Radioactivity- RCS Leakage Detection a) Unit 2 (2RE-PR011B)S4. Particulate Radioactivity- RCS Leakage Detection a) Unit 1 (IRE-PR011A)S5. Main Control Room Isolation- Outside Air Intake-Gaseous Radioactivity-High a) Train A (ORE-PR031B/32B)S	FUNCTIONAL UNITCHECKCALIBRATION1. Fuel Building Isolation- Radioactivity-High and Criticality (ORE-AR055/56)SR2. Containment Isolation- Containment Radioactivity- High a) Unit 1 (IRE-AR011/12)SR3. Gaseous Radioactivity- RCS Leakage Detection a) Unit 1 (IRE-PR011B)SR3. Gaseous Radioactivity- RCS Leakage Detection a) Unit 1 (IRE-PR011B)SR4. Particulate Radioactivity- RCS Leakage Detection a) Unit 1 (IRE-PR011A)SR5. Main Control Room Isolation- Outside Air Intake-Gaseous Radioactivity-High a) Train A (ORE-PR031B/32B)SR	FUNCTIONAL UNITCHANNEL CHECKCHANNEL CALIBRATIONCHANNEL OPERATIONAL TEST1. Fuel Building Isolation- Radioactivity-High and Criticality (ORE-AR055/56)SRI2. Containment Isolation- Containment Radioactivity- High a) Unit 1 (1RE-AR011/12)SRM3. Gaseous Radioactivity- RCS Leakage Detection a) Unit 1 (1RE-PR011B)SRM4. Particulate Radioactivity- RCS Leakage Detection a) Unit 1 (1RE-PR011B)SRM5. Main Control Room Isolation- Outside Air Intake-Gaseous Radioactivity-High a) Train A (ORE-PR031B/32B)SRM	

\*With new fuel or irradiated fuel in the fuel storage areas or fuel building.

BRAIDWOOD - UNITS

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AMENDMENT NO. 37