May 22, 1989

Docket Nos. 50-454, 50-455
and 50-456, 50-457

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Mr. Thomas J. Kovach
Nuclear Licensing Manager
Commonwealth Edison Company
Post Office Box 767
Chicago, Illinois 60690

Dear Mr. Kovach:

The Commission has issued the enclosed Amendment No. 28 to Facility Operating License No. NPF-37 and Amendment No. 28 to Facility Operating License No. NPF-66 for the Byron Station, Unit Nos. 1 and 2, respectively, and Amendment No. 17 to Facility Operating License No. NPF-72, and Amendment No. 17 to Facility Operating License No. NPF-77 for Braidwood Station, Unit Nos. 1 and 2, respectively. The amendments consist of changes to the Technical Specifications in response to your application transmitted by letter dated December 23, 1987, supplemented April 3, 1989.

These amendments approve changes that modify Technical Specification Tables 3.3-1 and 4.3-1, as requested in Generic Letter 85-09, for Reactor Trip System Automatic actuation using shunt trip coil attachments.

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

Sincerely,

/S/

Stephen P. Sands, Project Manager
Project Directorate III-2
Division of Reactor Projects - III,
IV, V and Special Projects

/S/

Leonard N. Olshan, Project Manager
Project Directorate III-2
Division of Reactor Projects - III,
IV, V and Special Projects

Enclosures:
1. Amendment No. 28 to NPF-37
2. Amendment No. 28 to NPF-66
3. Amendment No. 17 to NPF-72
4. Amendment No. 17 to NPF-77
5. Safety Evaluation

cc: w/enclosures
See next page

*PREVIOUSLY CONCURRED

PDIII-2:PM*	PDIII-2:PM*	PDIII-2:LA*	OGC-Rockville*	PDIII-2:PD*	SICB:BC*
LOlshan:km	SSands	LLuther	RBachmann	DMuller	SNewberry
4/14/89	4/18/89	4/19/89	4/25/89	4/20/89	4/20/89

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Docket Nos. 50-454, 50-455
and 50-456, 50-457

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OGC-Rockville	ARM/LFMB
DHagan	EJordan

Mr. Henry E. Bliss
Nuclear Licensing Manager
Commonwealth Edison Company
Post Office Box 767
Chicago, Illinois 60690

Dear Mr. Bliss:

The Commission has issued the enclosed Amendment No. 28 to Facility Operating License No. NPF-37 and Amendment No. 28 to Facility Operating License No. NPF-66 for the Byron Station, Unit Nos. 1 and 2, respectively, and Amendment No. 17 to Facility Operating License No. NPF-72, and Amendment No. 17 to Facility Operating License No. NPF-77 for Braidwood Station, Unit Nos. 1 and 2, respectively. The amendments consist of changes to the Technical Specifications in response to your application transmitted by letter dated December 23, 1987, supplemented April 3, 1989.

These amendments approve changes that modify Technical Specification Tables 3.3-1 and 4.3-1, as requested in Generic Letter 85-09, for Reactor Trip System Automatic actuation using shunt trip coil attachments.

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

Sincerely,

/S/ /S/

Stephen P. Sands, Project Manager
Project Directorate III-2
Division of Reactor Projects - III,
IV, V and Special Projects

Leonard N. Olshan, Project Manager
Project Directorate III-2
Division of Reactor Projects - III,
IV, V and Special Projects

Enclosures:
1. Amendment No. 28 to NPF-37
2. Amendment No. 28 to NPF-66
3. Amendment No. 17 to NPF-72
4. Amendment No. 17 to NPF-77
5. Safety Evaluation

cc: w/enclosures
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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

May 22, 1989

Docket Nos. 50-454, 50-455
and 50-456, 50-457

Mr. Thomas J. Kovach
Nuclear Licensing Manager
Commonwealth Edison Company
Post Office Box 767
Chicago, Illinois 60690

Dear Mr. Kovach:

The Commission has issued the enclosed Amendment No. 28 to Facility Operating License No. NPF-37 and Amendment No. 28 to Facility Operating License No. NPF-66 for the Byron Station, Unit Nos. 1 and 2, respectively, and Amendment No. 17 to Facility Operating License No. NPF-72, and Amendment No. 17 to Facility Operating License No. NPF-77 for Braidwood Station, Unit Nos. 1 and 2, respectively. The amendments consist of changes to the Technical Specifications in response to your application transmitted by letter dated December 23, 1987, supplemented April 3, 1989.

These amendments approve changes that modify Technical Specification Tables 3.3-1 and 4.3-1, as requested in Generic Letter 85-09, for Reactor Trip System Automatic actuation using shunt trip coil attachments.

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

Sincerely,

Stephen P. Sands

Stephen P. Sands, Project Manager
Project Directorate III-2
Division of Reactor Projects - III,
IV, V and Special Projects

Leonard N. Olshan

Leonard N. Olshan, Project Manager
Project Directorate III-2
Division of Reactor Projects - III,
IV, V and Special Projects

Enclosures:
1. Amendment No. 28 to NPF-37
2. Amendment No. 28 to NPF-66
3. Amendment No. 17 to NPF-72
4. Amendment No. 17 to NPF-77
5. Safety Evaluation

cc: w/enclosures
See next page

Mr. Thomas J. Kovach
Commonwealth Edison Company

Byron/Braidwood Power Station
Units 1 and 2

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

COMMONWEALTH EDISON COMPANY

DOCKET NO. 50-454

BYRON STATION, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 28
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 December 23, 1987, supplemented April 3, 1989, 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.

2. Accordingly, the license is amended by changes to the Technical Specification 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:

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(2) Technical Specifications

The Technical Specifications contained in Appendix A as revised through Amendment No. 28 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

Daniel R. Muller

Daniel R. Muller, Director
Project Directorate III-2
Division of Reactor Projects - III,
IV, V and Special Projects

Attachment:
Changes to the Technical
Specifications

Date of Issuance: May 22, 1989

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

COMMONWEALTH EDISON COMPANY

DOCKET NO. 50-455

BYRON STATION, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 28
License No. NPF-66

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment by Commonwealth Edison Company (the licensee) dated December 23, 1987, supplemented April 3, 1989, 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.

2. 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:

(2) Technical Specifications

The Technical Specifications contained in Appendix A (NUREG-1113), as revised through Amendment No. 28 and revised by Attachment 2 to NPF-60, and the Environmental Protection Plan contained in Appendix B, both of which are 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

Daniel R. Muller

Daniel R. Muller, Director
Project Directorate III-2
Division of Reactor Projects - III,
IV, V and Special Projects

Attachment:
Changes to the Technical
Specifications

Date of Issuance: May 22, 1989

ATTACHMENT TO LICENSE AMENDMENT NOS. 28 AND 28

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

DOCKET NOS. 50-454 AND 50-455

Revise Appendix A as follows:

Remove Pages	Insert Pages
2-6	2-6
3/4 3-4	3/4 3-4
3/4 3-5	3/4 3-5
3/4 3-6	3/4 3-6
	3/4 3-6a
3/4 3-9	3/4 3-9
3/4 3-11	3/4 3-11
3/4 3-12	3/4 3-12a

TABLE 2.2-1 (Continued)

REACTOR TRIP SYSTEM INSTRUMENTATION TRIP SETPOINTS

FUNCTIONAL UNIT	TOTAL ALLOWANCE (TA)	Z	SENSOR ERROR (SE)	TRIP SETPOINT	ALLOWABLE VALUE
19. Reactor Trip System Interlocks					
a. Intermediate Range Neutron Flux, P-6	N.A.	N.A.	N.A.	$\geq 1 \times 10^{-10}$ amp	$\geq 6 \times 10^{-11}$ amp
b. Low Power Reactor Trips Block, P-7					
1) P-10 input	N.A.	N.A.	N.A.	$\leq$10% of RTP*	$\geq$7.9% to $\leq$12.1% of RTP*
2) P-13 input	N.A.	N.A.	N.A.	$\leq$10% RTP* Turbine Impulse Pressure Equivalent	$\leq$12.1% RTP* Turbine Impulse Pressure Equivalent
c. Power Range Neutron Flux, P-8	N.A.	N.A.	N.A.	$\leq$30% of RTP*	$\leq$32.1% of RTP*
d. Power Range Neutron Flux, P-10	N.A.	N.A.	N.A	$\leq$10% of RTP*	$\geq$7.9% to $\leq$12.1% of RTP*
e. Turbine Impulse Chamber Pressure, P-13	N.A.	N.A.	N.A.	$\leq$10% RTP* Turbine Impulse Pressure Equivalent	$\leq$12.1% RTP* Turbine Impulse Pressure Equivalent
20. Reactor Trip Breakers	N.A.	N.A.	N.A	N.A.	N.A.
21. Automatic Trip and Interlock Logic	N.A.	N.A.	N.A.	N.A.	N.A.
22. Reactor Trip Bypass Breakers	N.A.	N.A.	N.A.	N.A.	N.A.

*RTP = RATED THERMAL POWER

TABLE 3.3-1 (Continued)

REACTOR TRIP SYSTEM INSTRUMENTATION

FUNCTIONAL UNIT	TOTAL NO. OF CHANNELS	CHANNELS TO TRIP	MINIMUM CHANNELS OPERABLE	APPLICABLE MODES	ACTION
17. Safety Injection Input from ESF	2	1	2	1, 2	9
18. Reactor Coolant Pump Breaker Position Trip Above P-7	1/breaker	2	1/breaker per operating loop	1	11#
19. Reactor Trip System Interlocks					
a. Intermediate Range Neutron Flux, P-6	2	1	2	2##	8
b. Low Power Reactor Trips Block, P-7					
P-10 Input	4	2	3	1	8
or					
P-13 Input	2	1	2	1	8
c. Power Range Neutron Flux, P-8	4	2	3	1	8
d. Power Range Neutron Flux, P-10	4	2	3	1, 2	8
e. Turbine Impulse Chamber Pressure, P-13	2	1	2	1	8
20. Reactor Trip Breakers	2	1	2	1, 2	12
	2	1	2	3*, 4*, 5*	10
21. Automatic Trip and Interlock Logic	2	1	2	1, 2	9
	2	1	2	3*, 4*, 5*	10
22. Reactor Trip Bypass Breakers	2	1	1	@,*	13

TABLE 3.3-1 (Continued)

TABLE NOTATIONS

*With the Reactor Trip System breakers in the closed position and the Control Rod Drive System capable of rod withdrawal.
**The boron dilution flux doubling signals may be blocked during reactor startup.
***These channels also provide inputs to ESFAS. The Action Statement for the channels in Table 3.3-3 is more conservative and, therefore, controlling.
#The provisions of Specification 3.0.4 are not applicable.
##Below the P-6 (Intermediate Range Neutron Flux Interlock) Setpoint.
###Below the P-10 (Low Setpoint Power Range Neutron Flux Interlock) Setpoint.
@Whenever the Reactor Trip Bypass Breakers are racked in and closed for bypassing a Reactor Trip Breaker.

ACTION STATEMENTS

ACTION 1 - With the number of OPERABLE channels one less than the Minimum Channels OPERABLE requirement, restore the inoperable channel to OPERABLE status within 48 hours or be in HOT STANDBY within the next 6 hours.

ACTION 2 - With the number of OPERABLE channels one less than the Total Number of Channels, STARTUP and/or POWER OPERATION may proceed provided the following conditions are satisfied:

a. The inoperable channel is placed in the tripped condition within 6 hours;

b. The Minimum Channels OPERABLE requirement is met; however, the inoperable channel may be bypassed for up to 4 hours for surveillance testing of other channels per Specification 4.3.1.1; and

c. Either, THERMAL POWER is restricted to less than or equal to 75% of RATED THERMAL POWER and the Power Range Neutron Flux Trip Setpoint is reduced to less than or equal to 85% of RATED THERMAL POWER within 4 hours; or, the QUADRANT POWER TILT RATIO is monitored at least once per 12 hours per Specification 4.2.4.2.

ACTION 3 - With the number of channels OPERABLE one less than the Minimum Channels OPERABLE requirement and with the THERMAL POWER level:

a. Below the P-6 (Intermediate Range Neutron Flux Interlock) Setpoint, restore the inoperable channel to OPERABLE status prior to increasing THERMAL POWER above the P-6 Setpoint; and

b. Above the P-6 (Intermediate Range Neutron Flux Interlock) Setpoint but below 10% of RATED THERMAL POWER, restore the inoperable channel to OPERABLE status prior to increasing THERMAL POWER above 10% of RATED THERMAL POWER.

TABLE 3.3-1 (Continued)
ACTION STATEMENTS (Continued)

ACTION 4 - With the number of OPERABLE channels one less than the Minimum Channels OPERABLE requirement suspend all operations involving positive reactivity changes.

ACTION 5 - With the number of OPERABLE channels one less than the Minimum Channels OPERABLE requirement restore the inoperable channel to OPERABLE status within 48 hours or within the next hour open the reactor trip breakers, suspend all operations involving positive reactivity changes, and verify valves CV-111B, CV-8428, CV-8439, CV-8441 and CV-8435 are closed and secured in position. With no channels OPERABLE verify compliance with the SHUTDOWN MARGIN requirements of Specification 3.1.1.1 or 3.1.1.2, as applicable, and take the actions stated above within 1 hour and verify compliance at least once per 12 hours thereafter.

ACTION 6 - With the number of OPERABLE channels one less than the Total Number of Channels, STARTUP and/or POWER OPERATION may proceed provided the following conditions are satisfied:

a. The inoperable channel is placed in the tripped condition within 6 hours; and

b. The Minimum Channels OPERABLE requirement is met; however, the inoperable channel may be bypassed for up to 4 hours for surveillance testing of other channels per Specification 4.3.1.1.

ACTION 7 - Deleted

ACTION 8 - With less than the Minimum Number of Channels OPERABLE, within 1 hour determine by observation of the associated permissive annunciator window(s) that the interlock is in its required state for the existing plant condition, or apply Specification 3.0.3.

ACTION 9 - With the number of OPERABLE channels one less than the Minimum Channels OPERABLE requirement, be in at least HOT STANDBY within 6 hours; however, one channel may be bypassed for up to 2 hours for surveillance testing per Specification 4.3.1.1, provided the other channel is OPERABLE.

ACTION 10 - With the number of OPERABLE channels one less than the Minimum Channels OPERABLE requirement, restore the inoperable channel to OPERABLE status within 48 hours or open the Reactor trip breakers within the next hour.

ACTION 11 - With the number of OPERABLE channels less than the Total Number of Channels, operation may continue provided the inoperable channels are placed in the tripped condition within 1 hour.

ACTION 12 - a. With one of the diverse trip features (Undervoltage or Shunt Trip attachment) inoperable, restore it to OPERABLE

status within 48 hours or declare the breaker inoperable and apply the requirements of b below. The breaker shall not be bypassed while one of the diverse trip features is inoperable, except for the time required for performing maintenance and testing to restore the diverse trip feature to OPERABLE status.

b. With one of the Reactor Trip Breakers otherwise inoperable, be in at least HOT STANDBY within 6 hours; however, one Reactor Trip Breaker may be bypassed for up to 2 hours for surveillance testing per Specification 4.3.1.1, provided the other Reactor Trip Breaker is OPERABLE.

ACTION 13 - With the Reactor Trip Bypass Breaker inoperable, restore the Reactor Trip Bypass Breaker to OPERABLE status prior to using the Reactor Trip Bypass Breaker to bypass a Reactor Trip Breaker. If the Reactor Trip Bypass Breaker is racked in and closed for bypassing a Reactor Trip Breaker and it becomes inoperable, be in at least HOT STANDBY within 6 hours. Restore the Bypass Breaker to OPERABLE status within the next 48 hours or open the Bypass Breaker within the following hour.

TABLE 4.3-1

REACTOR TRIP SYSTEM INSTRUMENTATION SURVEILLANCE REQUIREMENTS

FUNCTIONAL UNIT	CHANNEL CHECK	CHANNEL CALIBRATION	ANALOG CHANNEL OPERATIONAL TEST	TRIP ACTUATING DEVICE OPERATIONAL TEST	ACTUATION LOGIC TEST	MODES FOR WHICH SURVEILLANCE IS REQUIRED
1. Manual Reactor Trip	N.A.	N.A.	N.A.	R(14)	N.A.	1, 2, 3*, 4*, 5*
2. Power Range, Neutron Flux						
a. High Setpoint	S	D(2, 4), M(3, 4), Q(4, 6), R(4, 5a)#	Q	N.A.	N.A.	1, 2
b. Low Setpoint	S	R(4)#	Q	N.A.	N.A.	1###, 2
3. Power Range, Neutron Flux, High Positive Rate	N.A.	R(4)#	Q	N.A.	N.A.	1, 2
4. Power Range, Neutron Flux, High Negative Rate	N.A.	R(4)#	Q	N.A.	N.A.	1, 2
5. Intermediate Range, Neutron Flux	S	R(4, 5a)#	Q	N.A.	N.A.	1###, 2
6. Source Range, Neutron Flux	S	R(4, 5b, 12)#	Q(9)	N.A.	N.A.	2##, 3, 4, 5
7. Overtemperature ΔT	S	R(13)#	Q	N.A.	N.A.	1, 2
8. Overpower ΔT	S	R#	Q	N.A.	N.A.	1, 2
9. Pressurizer Pressure-Low (Above P-7)	S	R#	Q**	N.A.	N.A.	1
10. Pressurizer Pressure-High	S	R#	Q	N.A.	N.A.	1, 2
11. Pressurizer Water Level-High (Above P-7)	S	R#	Q	N.A.	N.A.	1

TABLE 4.3-1 (Continued)

REACTOR TRIP SYSTEM INSTRUMENTATION SURVEILLANCE REQUIREMENTS

FUNCTIONAL UNIT	CHANNEL CHECK	CHANNEL CALIBRATION	ANALOG CHANNEL OPERATIONAL TEST	TRIP ACTUATING DEVICE OPERATIONAL TEST	ACTUATION LOGIC TEST	MODES FOR WHICH SURVEILLANCE IS REQUIRED
19. Reactor Trip System Interlocks (Continued)						
d. Low Setpoint Power Range Neutron Flux, P-10	N.A.	R(4)#	Q (8)	N.A.	N.A.	1, 2
e. Turbine Impulse Chamber Pressure, P-13	N.A.	R#	Q (8)	N.A.	N.A.	1
20. Reactor Trip Breaker	N.A.	N.A.	N.A.	M (11)	N.A.	1, 2, 3*, 4*, 5*
21. Automatic Trip and Interlock Logic	N.A.	N.A.	N.A.	N.A.	M (7)	1, 2, 3*, 4*, 5*
22. Reactor Trip Bypass Breakers	N.A.	N.A.	N.A.	(15),R(16)	N.A.	1, 2, 3*, 4*, 5*

TABLE 4.3-1 (Continued)

TABLE NOTATIONS

(10) Setpoint verification is not applicable.

(11) The TRIP ACTUATING DEVICE OPERATIONAL TEST shall be performed such that each train is tested at least every 62 days on a STAGGERED TEST BASIS and following maintenance or adjustment of the Reactor Trip Breakers and shall include independent verification of the OPERABILITY of the Undervoltage and Shunt Trip Attachments of the Reactor Trip Breakers.

(12) At least once per 18 months during shutdown verify that on a simulated Boron Dilution Doubling test signal CVCS valves 112D and E open and 112B and C close within 30 seconds.

(13) CHANNEL CALIBRATION shall include the RTD bypass loops flow rate.

(14) Verify that the appropriate signals reach the Undervoltage and Shunt Trip Relays, for both the Reactor Trip and Bypass Breakers from the Manual Trip Switches. Initial performance of this surveillance requirement for the Reactor Trip Bypass Breakers is to be completed prior to the startup following the third refueling outage for Unit 1 and the second refueling outage for Unit 2.

(15) Manual Shunt Trip prior to the Reactor Trip Bypass Breaker being racked in and closed for bypassing a Reactor Trip Breaker.

(16) Automatic Undervoltage trip. Initial performance of this surveillance requirement is to be completed prior to the startup following the third refueling outage for Unit 1 and the second refueling outage for Unit 2.

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

COMMONWEALTH EDISON COMPANY

DOCKET NO. 50-456

BRAIDWOOD STATION, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 17
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 December 23, 1987, supplemented April 3, 1989, 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.

2. Accordingly, the license is amended by changes to the Technical Specification 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:

(2) Technical Specifications

The Technical Specifications contained in Appendix A as revised through Amendment No. 17 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

Daniel R. Muller

Daniel R. Muller, Director
Project Directorate III-2
Division of Reactor Projects - III,
IV, V and Special Projects

Attachment:
Changes to the Technical
Specifications

Date of Issuance: May 22, 1989

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

COMMONWEALTH EDISON COMPANY

DOCKET NO. 50-457

BRAIDWOOD STATION, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 17
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 December 23, 1987, supplemented April 3, 1989, 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.

2. Accordingly, the license is amended by changes to the Technical Specification 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:

(2) Technical Specifications

The Technical Specifications contained in Appendix A as revised through Amendment No. 17 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.

3. This license amendment is effective as of the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Daniel R. Muller

Daniel R. Muller, Director
Project Directorate III-2
Division of Reactor Projects - III,
IV, V and Special Projects

Attachment:
Changes to the Technical
Specifications

Date of Issuance: May 22, 1989

ATTACHMENT TO LICENSE AMENDMENT NOS. 17 AND 17

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

DOCKET NOS. 50-456 AND 50-457

Revise Appendix A as follows:

Remove Pages	Insert Pages
2-6	2-6
3/4 3-4	3/4 3-4
3/4 3-5	3/4 3-5
3/4 3-6	3/4 3-6
	3/4 3-6a
3/4 3-9	3/4 3-9
3/4 3-11	3/4 3-11
3/4 3-12	3/4 3-12
3/4 3-12a	3/4 3-12a

TABLE 2.2-1 (Continued)

REACTOR TRIP SYSTEM INSTRUMENTATION TRIP SETPOINTS

FUNCTIONAL UNIT	TOTAL ALLOWANCE (TA)	Z	SENSOR ERROR (SE)	TRIP SETPOINT	ALLOWABLE VALUE
19. Reactor Trip System Interlocks					
a. Intermediate Range Neutron Flux, P-6	N.A.	N.A.	N.A.	$\geq 1 \times 10^{-10}$ amp	$\geq 6 \times 10^{-11}$ amp
b. Low Power Reactor Trips Block, P-7					
1) P-10 input	N.A.	N.A.	N.A.	$\leq$10% of RTP*	$\geq$7.9% to $\leq$12.1% of RTP*
2) P-13 input	N.A.	N.A.	N.A.	$\leq$10% RTP* Turbine Impulse Pressure Equivalent	$\leq$12.1% RTP* Turbine Impulse Pressure Equivalent
c. Power Range Neutron Flux, P-8	N.A.	N.A.	N.A.	$\leq$30% of RTP*	$\leq$32.1% of RTP*
d. Power Range Neutron Flux, P-10	N.A.	N.A.	N.A	$\leq$10% of RTP*	$\geq$7.9% to $\leq$12.1% of RTP*
e. Turbine Impulse Chamber Pressure, P-13	N.A.	N.A.	N.A.	$\leq$10% RTP* Turbine Impulse Pressure Equivalent	$\leq$12.1% RTP* Turbine Impulse Pressure Equivalent
20. Reactor Trip Breakers	N.A.	N.A.	N.A	N.A.	N.A.
21. Automatic Trip and Interlock Logic	N.A.	N.A.	N.A.	N.A.	N.A.
22. Reactor Trip Bypass Breakers	N.A.	N.A.	N.A.	N.A.	N.A.

*RTP = RATED THERMAL POWER

TABLE 3.3-1 (Continued)

REACTOR TRIP SYSTEM INSTRUMENTATION

FUNCTIONAL UNIT	TOTAL NO. OF CHANNELS	CHANNELS TO TRIP	MINIMUM CHANNELS OPERABLE	APPLICABLE MODES	ACTION
17. Safety Injection Input from ESF	2	1	2	1, 2	9
18. Reactor Coolant Pump Breaker Position Trip Above P-7	1/breaker	2	1/breaker per operating loop	1	11#
19. Reactor Trip System Interlocks					
a. Intermediate Range Neutron Flux, P-6	2	1	2	2##	8
b. Low Power Reactor Trips Block, P-7					
P-10 Input	4	2	3	1	8
or					
P-13 Input	2	1	2	1	8
c. Power Range Neutron Flux, P-8	4	2	3	1	8
d. Power Range Neutron Flux, P-10	4	2	3	1, 2	8
e. Turbine Impulse Chamber Pressure, P-13	2	1	2	1	8
20. Reactor Trip Breakers	2	1	2	1, 2	12
	2	1	2	3*, 4*, 5*	10
21. Automatic Trip and Interlock Logic	2	1	2	1, 2	9
	2	1	2	3*, 4*, 5*	10
22. Reactor Trip Bypass Breakers	2	1	1	@,*	13

TABLE 3.3-1 (Continued)

TABLE NOTATIONS

*With the Reactor Trip System breakers in the closed position and the Control Rod Drive System capable of rod withdrawal.
**The boron dilution flux doubling signals may be blocked during reactor startup.
***These channels also provide inputs to ESFAS. The Action Statement for the channels in Table 3.3-3 is more conservative and, therefore, controlling.
#The provisions of Specification 3.0.4 are not applicable.
##Below the P-6 (Intermediate Range Neutron Flux Interlock) Setpoint.
###Below the P-10 (Low Setpoint Power Range Neutron Flux Interlock) Setpoint.
@Whenever the Reactor Trip Bypass Breakers are racked in and closed for bypassing a Reactor Trip Breaker.

ACTION STATEMENTS

ACTION 1 - With the number of OPERABLE channels one less than the Minimum Channels OPERABLE requirement, restore the inoperable channel to OPERABLE status within 48 hours or be in HOT STANDBY within the next 6 hours.

ACTION 2 - With the number of OPERABLE channels one less than the Total Number of Channels, STARTUP and/or POWER OPERATION may proceed provided the following conditions are satisfied:

a. The inoperable channel is placed in the tripped condition within 6 hours;

b. The Minimum Channels OPERABLE requirement is met; however, the inoperable channel may be bypassed for up to 4 hours for surveillance testing of other channels per Specification 4.3.1.1; and

c. Either, THERMAL POWER is restricted to less than or equal to 75% of RATED THERMAL POWER and the Power Range Neutron Flux Trip Setpoint is reduced to less than or equal to 85% of RATED THERMAL POWER within 4 hours; or, the QUADRANT POWER TILT RATIO is monitored at least once per 12 hours per Specification 4.2.4.2.

ACTION 3 - With the number of channels OPERABLE one less than the Minimum Channels OPERABLE requirement and with the THERMAL POWER level:

a. Below the P-6 (Intermediate Range Neutron Flux Interlock) Setpoint, restore the inoperable channel to OPERABLE status prior to increasing THERMAL POWER above the P-6 Setpoint; and

b. Above the P-6 (Intermediate Range Neutron Flux Interlock) Setpoint but below 10% of RATED THERMAL POWER, restore the inoperable channel to OPERABLE status prior to increasing THERMAL POWER above 10% of RATED THERMAL POWER.

TABLE 3.3-1 (Continued)
ACTION STATEMENTS (Continued)

ACTION 4 - With the number of OPERABLE channels one less than the Minimum Channels OPERABLE requirement suspend all operations involving positive reactivity changes.

ACTION 5 - With the number of OPERABLE channels one less than the Minimum Channels OPERABLE requirement restore the inoperable channel to OPERABLE status within 48 hours or within the next hour open the reactor trip breakers, suspend all operations involving positive reactivity changes, and verify valves CV-111B, CV-8428, CV-8439, CV-8441 and CV-8435 are closed and secured in position. With no channels OPERABLE verify compliance with the SHUTDOWN MARGIN requirements of Specification 3.1.1.1 or 3.1.1.2, as applicable, and take the actions stated above within 1 hour and verify compliance at least once per 12 hours thereafter.

ACTION 6 - With the number of OPERABLE channels one less than the Total Number of Channels, STARTUP and/or POWER OPERATION may proceed provided the following conditions are satisfied:

a. The inoperable channel is placed in the tripped condition within 6 hours; and

b. The Minimum Channels OPERABLE requirement is met; however, the inoperable channel may be bypassed for up to 4 hours for surveillance testing of other channels per Specification 4.3.1.1.

ACTION 7 - Deleted

ACTION 8 - With less than the Minimum Number of Channels OPERABLE, within 1 hour determine by observation of the associated permissive annunciator window(s) that the interlock is in its required state for the existing plant condition, or apply Specification 3.0.3.

ACTION 9 - With the number of OPERABLE channels one less than the Minimum Channels OPERABLE requirement, be in at least HOT STANDBY within 6 hours; however, one channel may be bypassed for up to 2 hours for surveillance testing per Specification 4.3.1.1, provided the other channel is OPERABLE.

ACTION 10 - With the number of OPERABLE channels one less than the Minimum Channels OPERABLE requirement, restore the inoperable channel to OPERABLE status within 48 hours or open the Reactor trip breakers within the next hour.

ACTION 11 - With the number of OPERABLE channels less than the Total Number of Channels, operation may continue provided the inoperable channels are placed in the tripped condition within 1 hour.

ACTION 12 - a. With one of the diverse trip features (Undervoltage or Shunt Trip Attachment) inoperable, restore it to OPERABLE

status within 48 hours or declare the breaker inoperable and apply the requirements of b below. The breaker shall not be bypassed while one of the diverse trip features is inoperable, except for the time required for performing maintenance and testing to restore the diverse trip feature to OPERABLE status.

b. With one of the Reactor Trip Breakers otherwise inoperable, be in at least HOT STANDBY within 6 hours; however, one Reactor Trip Breaker may be bypassed for up to 2 hours for surveillance testing per Specification 4.3.1.1, provided the other Reactor Trip Breaker is OPERABLE.

ACTION 13 - With the Reactor Trip Bypass Breaker inoperable, restore the Reactor Trip Bypass Breaker to OPERABLE status prior to using the Reactor Trip Bypass Breaker to bypass a Reactor Trip Breaker. If the Reactor Trip Bypass Breaker is racked in and closed for bypassing a Reactor Trip Breaker and it becomes inoperable, be in at least HOT STANDBY within 6 hours. Restore the Bypass Breaker to OPERABLE status within the next 48 hours or open the Bypass Breaker within the following hour.

TABLE 4.3-1

REACTOR TRIP SYSTEM INSTRUMENTATION SURVEILLANCE REQUIREMENTS

FUNCTIONAL UNIT	CHANNEL CHECK	CHANNEL CALIBRATION	ANALOG CHANNEL OPERATIONAL TEST	TRIP ACTUATING DEVICE OPERATIONAL TEST	ACTUATION LOGIC TEST	MODES FOR WHICH SURVEILLANCE IS REQUIRED
1. Manual Reactor Trip	N.A.	N.A.	N.A.	R(14)	N.A.	1, 2, 3*, 4*, 5*
2. Power Range, Neutron Flux						
a. High Setpoint	S	D(2, 4), M(3, 4) Q(4, 6), R(4, 5a)#	Q	N.A.	N.A.	1, 2
b. Low Setpoint	S	R(4)#	Q	N.A.	N.A.	1###, 2
3. Power Range, Neutron Flux, High Positive Rate	N.A.	R(4)#	Q	N.A.	N.A.	1, 2
4. Power Range, Neutron Flux, High Negative Rate	N.A.	R(4)#	Q	N.A.	N.A.	1, 2
5. Intermediate Range, Neutron Flux	S	R(4, 5a)#	Q	N.A.	N.A.	1###, 2
6. Source Range, Neutron Flux	S	R(4, 5b, 12)#	Q(9)	N.A.	N.A.	2##, 3, 4, 5
7. Overtemperature ΔT	S	R(13)#	Q	N.A.	N.A.	1, 2
8. Overpower ΔT	S	R#	Q	N.A.	N.A.	1, 2
9. Pressurizer Pressure-Low (Above P-7)	S	R#	Q**	N.A.	N.A.	1
10. Pressurizer Pressure-High	S	R#	Q	N.A.	N.A.	1, 2
11. Pressurizer Water Level-High (Above P-7)	S	R#	Q	N.A.	N.A.	1

TABLE 4.3-1 (Continued)

REACTOR TRIP SYSTEM INSTRUMENTATION SURVEILLANCE REQUIREMENTS

FUNCTIONAL UNIT	CHANNEL CHECK	CHANNEL CALIBRATION	ANALOG CHANNEL OPERATIONAL TEST	TRIP ACTUATING DEVICE OPERATIONAL TEST	ACTUATION LOGIC TEST	MODES FOR WHICH SURVEILLANCE IS REQUIRED
19. Reactor Trip System Interlocks (Continued)						
d. Low Setpoint Power Range Neutron Flux, P-10	N.A.	R(4)#	Q (8)	N.A.	N.A.	1, 2
e. Turbine Impulse Chamber Pressure, P-13	N.A.	R#	Q (8)	N.A.	N.A.	1
20. Reactor Trip Breakers	N.A.	N.A.	N.A.	M (11)	N.A.	1, 2, 3*, 4*, 5*
21. Automatic Trip and Interlock Logic	N.A.	N.A.	N.A.	N.A.	M (7)	1, 2, 3*, 4*, 5*
22. Reactor Trip Bypass Breakers	N.A.	N.A.	N.A.	(15), R (16)	N.A.	1, 2, 3*, 4*, 5*

TABLE 4.3-1 (Continued)

TABLE NOTATIONS

*With the Reactor Trip System breakers closed and the Control Rod Drive System capable of rod withdrawal.

**These channels also provide inputs to ESFAS. The Operational Test Frequency for these channels in Table 4.3-2 is more conservative and, therefore, controlling.

#The specified 18 month interval may be extended to 32 months for cycle 1 only.

##Below P-6 (Intermediate Range Neutron Flux Interlock) Setpoint.

###Below P-10 (Low Setpoint Power Range Neutron Flux Interlock) Setpoint.

(1) If not performed in previous 7 days.

(2) Comparison of calorimetric to excore power indication above 15% of RATED THERMAL POWER. Adjust excore channel gains consistent with calorimetric power if absolute difference is greater than 2%. The provisions of Specification 4.0.4 are not applicable for entry into MODE 2 or 1.

(3) Single point comparison of incore to excore AXIAL FLUX DIFFERENCE above 15% of RATED THERMAL POWER. Recalibrate if the absolute difference is greater than or equal to 3%. The provisions of Specification 4.0.4 are not applicable for entry into MODE 2 or 1.

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

(5a) Initial plateau curves shall be measured for each detector. Subsequent plateau curves shall be obtained, evaluated and compared to the initial curves. For the Intermediate Range and Power Range Neutron Flux channels the provisions of Specification 4.0.4 are not applicable for entry into MODE 2 or 1.

(5b) With the high voltage setting varied as recommended by the manufacturer, an initial discriminator bias curve shall be measured for each detector. Subsequent discriminator bias curves shall be obtained, evaluated and compared to the initial curves.

(6) Incore - Excore Calibration, above 75% of RATED THERMAL POWER. The provisions of Specification 4.0.4 are not applicable for entry into MODE 2 or 1.

(7) Each train shall be tested at least every 62 days on a STAGGERED TEST BASIS.

(8) With power greater than or equal to the interlock Setpoint the required ANALOG CHANNEL OPERATIONAL TEST shall consist of verifying that the interlock is in the required state by observing the permissive annunciator window.

(9) Surveillance in MODES 3*, 4*, and 5* shall also include verification that permissives P-6 and P-10 are in their required state for existing plant conditions by observation of the permissive annunciator window. Surveillance shall include verification of the Boron Dilution Alarm Setpoint of less than or equal to an increase of twice the count rate within a 10-minute period.

(10) Setpoint verification is not applicable.

TABLE 4.3-1 (Continued)

TABLE NOTATIONS

(11) The TRIP ACTUATING DEVICE OPERATIONAL TEST shall be performed such that each train is tested at least every 62 days on a STAGGERED TEST BASIS and following maintenance or adjustment of the Reactor Trip Breakers and shall include independent verification of the OPERABILITY of the Undervoltage and Shut Trip Attachments of the Reactor Trip Breakers.

(12) At least once per 18 months during shutdown verify that on a simulated Boron Dilution Doubling test signal CVCS valves 112D and E open and 112B and C close within 30 seconds.

(13) CHANNEL CALIBRATION shall include the RTD bypass loops flow rate.

(14) Verify that the appropriate signals reach the Undervoltage and Shunt Trip relays, for both the Reactor Trip and Bypass Breakers from the Manual Trip Switches. Initial performance of this surveillance requirement is to be completed prior to the Startup following the Unit 1 Cycle 1 Refuel Outage.

(15) Manual Shunt Trip prior to the Reactor Trip Bypass Breaker being racked in and closed by bypassing a Reactor Trip Breaker.

(16) Automatic undervoltage trip. Initial performance of this surveillance requirement is to be completed prior to the startup following the Unit 1 Cycle 1 Refuel Outage.

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 28 TO FACILITY OPERATING LICENSES

NOS. NPF-37 AND NPF-66

BYRON STATION, UNITS 1 AND 2

DOCKET NOS. 50-454 AND 50-455

AND

SUPPORTING AMENDMENT NO. 17 TO FACILITY OPERATING LICENSES

NOS. NPF-72 AND NPF-77

BRAIDWOOD STATION, UNITS 1 AND 2

DOCKET NOS. 50-456 AND 50-457

1.0 INTRODUCTION

On July 8, 1983, the Nuclear Regulatory Commission (NRC) issued Generic Letter 83-28 which described actions to be taken by licensees to resolve concerns raised by the Salem ATWS events. Item 4.3 of this letter requested licensees and applicants to modify the reactor trip system on Westinghouse and Babcock & Wilcox PWRs to automatically actuate the shunt trip attachment of the reactor trip breakers. Based on their review of the proposed Westinghouse design for automatically actuating the shunt trip device, the staff concluded that revisions to the plant technical specifications were needed to provide for surveillance testing of the shunt and undervoltage trip devices during power operation. On May 23, 1985, the staff issued Generic Letter 85-09 to all Westinghouse PWR licensees which clarified the original requirement for testing the trip devices by requiring that the shunt and undervoltage trip devices be tested independently during power operation. In addition, independent testing of the control room manual trip switch and wiring to both trip devices and testing of the reactor trip bypass breakers were required. These changes are considered necessary by the staff to ensure reliable operation of the reactor trip breakers.

2.0 EVALUATION

By letter dated December 23, 1987, supplemented April 3, 1989, Commonwealth Edison Company (the licensee) submitted proposed revisions to the Byron/Braidwood Technical Specifications based upon the NRC staff evaluation of the Westinghouse shunt trip attachment design and the requirements of Generic Letter 85-09. In response to the NRC requirements, the following Technical Specification revisions were proposed.

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1. Functional Unit 22 is being added to Technical Specification Table 2.2-1. This change is being made to be consistent with Technical Specification Tables 3.3-1 and 4.4-1, which also reference the Reactor Trip Bypass Breakers.

2. Action 9 is being deleted from, and Action 12 is being added to, Functional Unit 20 on Technical Specification Table 3.3-1. Action 12 is broken down into two independent requirements. Action 12-a invokes the actions stated in Action 14 of Generic Letter 85-09. This action permits continued operation for up to 48 hours when one of the Reactor Trip Breaker diverse trip features is found to be inoperable. After this 48 hours period elapses, Action Statement 12-b must be entered. Action Statement 12-b was previously Action 9. The words "Channel" have been replaced with "Reactor Trip Breaker" for clarity. This Action will require the unit to be placed in Hot Standby within 6 hours for any failure not addressed by Action 12-a.

3. Functional Unit 22 is being added to Technical Specification Table 3.3-1. The addition of Functional Unit 22 is necessary to provide both a condition of applicability and action statement for the Reactor Trip Bypass Breakers. The condition of applicability was chosen to be whenever the Reactor Trip Bypass Breaker is racked in and closed for the purpose of bypassing a Reactor Trip Breaker with the Unit in Modes 1 or 2, or in Modes, 3, 4, or 5 with the Control Rods capable of withdrawal. With a Reactor Trip Bypass Breaker inoperable, Action 13 requires the breaker to be returned to an operable status prior to using the breaker for the purpose of bypassing a Reactor Trip Breaker. The first portion of this Action Statement is stated this way due to the normal mode of discovering an inoperable breaker through the Manual Shunt Trip test, required prior to breaker use in the proposed Note 16 to Technical Specification Table 4.3-1.

   If the Bypass Breaker becomes inoperable after being racked in and closed for the purpose of bypassing a Reactor Trip Breaker, then the second portion of Action 13 will require the Unit to be placed in Hot Standby in 6 hours, then the breaker must be restored to operable status within the next 48 hours, or the breaker must be opened in the next hour. These actions are based on the present Action Statement 9 and 10 for the Reactor Trip Breakers. The testing clause associated with Action 9 was removed from Action 9, due to it not being applicable in this configuration.

4. Note 14 to Technical Specification Table 4.3-1 for Braidwood Station only is being deleted. This was a one time only change that has expired.

5. Note 14 is being added to the Trip Actuating Device Operational Test for Functional Unit 1 on Technical Specification Table 4.3-1. Note 14 requires that the appropriate signals reach the undervoltage and shunt trip relays for both the Reactor Trip and Bypass Breakers from the Manual Trip Switches. This note also provides an implementation time frame for this surveillance requirement. The implementation time frame chosen was due to this surveillance requiring the Unit to be in a shutdown condition to perform. The proposed change reflects the intent of Note 11 of Generic Letter 85-09.

6. Note 11 on the Trip Actuating Device Operational test for Functional Unit 20 on Technical Specification Table 4.3.1 is being revised. The requirements of Note 7 are being incorporated into Note 11 for clarity, and Note 7 has been deleted from Functional Unit 20. Note 11 has been revised to combine the need to independently verify the operability of both the undervoltage trip and the shunt trip attachment. A requirement to test these functions following maintenance or adjustment has also been incorporated into Note 11.

7. Functional Unit 22 is being added to Technical Specification Table 4.3-1. Included with this function unit are Notes 15 and 16 which require manual Shunt Trip testing prior to the Reactor Trip Bypass Breaker being racked in and closed for the purpose of bypassing a Reactor Trip Breaker. The monthly frequency designation associated with Note 15 is being deleted. The requirement to Shunt Trip test the Reactor Trip Bypass Breakers prior to use is controlled through Note 15 which references bypassing a Reactor Trip Breaker. Bypassing a Reactor Trip Breaker is required monthly in Functional Unit 20 and therefore the Reactor Trip Bypass Breaker will be tested monthly. Including the monthly frequency designation in Functional Unit 22 would be redundant and possibly lead to confusion.

   Note 16 requires the Reactor Trip Bypass Breaker to be trip tested from an automatic undervoltage signal once per 18 months. The Surveillance Requirement poses a high potential to cause a unit trip if performed with the unit on line. Due to this potential for a unit trip, this surveillance is being viewed as a shutdown item. Therefore, Note 16 also contains an implementation time frame.

On the basis of its review of the above items, the staff concludes that the licensee has provided an acceptable response to these items as addressed in the NRC guidance requiring independent testing of the undervoltage and shunt trip attachments during power operation and independent testing of the control room manual switch contacts during each refueling outage. Therefore, the staff finds that these changes are consistent with the recommendations in Generic Letter 85-09 and are acceptable.

3.0 ENVIRONMENTAL CONSIDERATION

The amendment involves change in the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The staff has determined that the amendment involves 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 exposures. The Commission has previously issued a proposed finding that the amendment involves no significant hazards consideration and there has been no public comment on such finding. Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR Section 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 amendment.

4.0 CONCLUSION

On the basis of the considerations discussed above, the NRC staff concludes 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 these amendments will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributors: Don Lasher and Leonard N. Olshan

Dated: May 22, 1989