

August 5, 1988

2

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

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

DISTRIBUTION:

Docket file

NRC & Local PDRs  
PDIII-2 r/f  
GHolahan  
LLuther  
TRoss  
OGC-Rockville  
DHagan  
EJordan

BGrimes  
TBarnhart (8)  
WJones  
EButcher  
ACRS (10)  
GPA/PA  
ARM/LFMB  
PDIII-2 Plant File

Dear Mr. Bliss:

The Commission has issued the enclosed Amendment No. 22 to Facility Operating License No. NPF-37 and Amendment No. 22 to Facility Operating License No. NPF-66 for the Byron Station, Unit Nos. 1 and 2, respectively, and Amendment No. 11 to Facility Operating License No. NPF-72, and Amendment No. 11 to Facility Operating License NPF-77 for Braidwood Station, Units No. 1 and 2, respectively. The amendments consist of changes to the Technical Specifications in response to your application transmitted by letter dated January 12, 1988.

These amendments approve changes to the Technical Specifications to modify the existing liquid radwaste effluent line flow monitor.

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,

151

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

151

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

Enclosures:

1. Amendment No.22to NPF-37
2. Amendment No.22to NPF-66
3. Amendment No.11to NPF-72
4. Amendment No.11to NPF-77
5. Safety Evaluation

cc: w/enclosures  
See next page

PDIII-2:PM  
LOlshan  
8/1/88

PDIII-2:PM  
SSands  
8/1/88

PDIII-2:LA  
LLuther  
8/1/88

PDIII-2:D  
DMuller  
/ /88

DFol  
7/11

8808260429 880805  
PDR ADOCK 05000454  
P PNU

August 5, 1988

2

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

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

DISTRIBUTION:

Docket file	BGrimes
NRC & Local PDRs	TBarnhart (8)
PDIII-2 r/f	WJones
GHolahan	EButcher
LLuther	ACRS (10)
TRoss	GPA/PA
OGC-Rockville	ARM/LFMB
DHagan	PDIII-2 Plant File
EJordan	

Dear Mr. Bliss:

The Commission has issued the enclosed Amendment No. 22 to Facility Operating License No. NPF-37 and Amendment No. 22 to Facility Operating License No. NPF-66 for the Byron Station, Unit Nos. 1 and 2, respectively, and Amendment No. 11 to Facility Operating License No. NPF-72, and Amendment No. 11 to Facility Operating License NPF-77 for Braidwood Station, Units No. 1 and 2, respectively. The amendments consist of changes to the Technical Specifications in response to your application transmitted by letter dated January 12, 1988.

These amendments approve changes to the Technical Specifications to modify the existing liquid radwaste effluent line flow monitor.

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,

151

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

151

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

Enclosures:

1. Amendment No.22to NPF-37
2. Amendment No.22to NPF-66
3. Amendment No.11to NPF-72
4. Amendment No.11to NPF-77
5. Safety Evaluation

cc: w/enclosures  
See next page

PDIII-2:PM  
LOlshan  
8/1/88

PDIII-2:PM  
SSands  
8/1/88

PDIII-2:LA  
LLuther  
8/1/88

PDIII-2:D  
DMuller  
/ /88



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

August 5, 1988

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

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. 22 to Facility Operating License No. NPF-37 and Amendment No. 22 to Facility Operating License No. NPF-66 for the Byron Station, Unit Nos. 1 and 2, respectively, and Amendment No. 11 to Facility Operating License No. NPF-72, and Amendment No. 11 to Facility Operating License NPF-77 for Braidwood Station, Units No. 1 and 2, respectively. The amendments consist of changes to the Technical Specifications in response to your application transmitted by letter dated January 12, 1988.

These amendments approve changes to the Technical Specifications to modify the existing liquid radwaste effluent line flow monitor.

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, 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. 22 to NPF-37
2. Amendment No. 22 to NPF-66
3. Amendment No. 11 to NPF-72
4. Amendment No. 11 to NPF-77
5. Safety Evaluation

cc: w/enclosures  
See next page

Mr. Henry Bliss  
Commonwealth Edison Company

Byron/Braidwood

cc:

Mr. William Kortier  
Atomic Power Distribution  
Westinghouse Electric Corporation  
Post Office Box 355  
Pittsburgh, Pennsylvania 15230

Dr. Bruce von Zellen  
Department of Biological Sciences  
Northern Illinois University  
DeKalb, Illinois 61107

Joseph Gallo, Esq.  
Hopkins and Sutter  
1050 Connecticut Ave., N.W.  
Suite 1250  
Washington, D. C. 20036

U. S. Nuclear Regulatory Commission  
Byron/Resident Inspectors Office  
4448 North German Church Road  
Byron, Illinois 61010

C. Allen Bock, Esquire  
Post Office Box 342  
Urbana, Illinois 61801

Ms. Lorraine Creek  
Rt. 1, Box 182  
Manteno, Illinois 60950

Regional Administrator  
U. S. NRC, Region III  
799 Roosevelt Road, Bldg. #4  
Glen Ellyn, Illinois 60137

Mrs. Phillip B. Johnson  
1907 Stratford Lane  
Rockford, Illinois 61107

Ms. Bridget Little Rorem  
Appleseed Coordinator  
117 North Linden Street  
Essex, Illinois 60935

Douglass Cassel, Esq.  
109 N. Dearborn Street  
Suite 1300  
Chicago, Illinois 60602

Mr. Edward R. Crass  
Nuclear Safeguards and Licensing  
Division  
Sargent & Lundy Engineers  
55 East Monroe Street  
Chicago, Illinois 60603

Ms. Pat Morrison  
5568 Thunderidge Drive  
Rockford, Illinois 61107

U. S. Nuclear Regulatory Commission  
Resident Inspectors Office  
RR#1, Box 79  
Braceville, Illinois 60407

David C. Thomas, Esq.  
77 S. Wacker Drive  
Chicago, Illinois 60601

Elena Z. Kezelis, Esq.  
Isham, Lincoln & Beale  
Three First National Plaza  
Suite 5200  
Chicago, Illinois 60602



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. 22  
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 January 12, 1988, 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-37 is hereby amended to read as follows:

BB08260442 BB0805  
PDR ADDCK 05000454  
PNU

(2) Technical Specifications

The Technical Specifications contained in Appendix A as revised through Amendment No. 22 and the Environment 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

  
for

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: August 5, 1988



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. 22  
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 January 12, 1988, 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.
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. 22 and revised by Attachment 2 to NPF-60, 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

  
for

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: August 5, 1988



ATTACHMENT TO LICENSE AMENDMENT NOS. 22 AND 22  
FACILITY OPERATING LICENSE NOS. NPF-37 AND NPF-66  
DOCKET NOS. 50-454 AND 50-455

Revise Appendix A as follows:

Remove Pages

3/4 3-58

3/4 3-60

Insert Pages

3/4 3-58

3/4 3-60

TABLE 3.3-12  
RADIOACTIVE LIQUID EFFLUENT MONITORING INSTRUMENTATION

	<u>INSTRUMENT</u>	<u>MINIMUM CHANNELS OPERABLE</u>	<u>ACTION</u>
1.	Radioactivity Monitors Providing Alarm and Automatic Termination of Release		
a.	Liquid Radwaste Effluent Line (ORE-PR001)	1	31
b.	Fire and Oil Sump Discharge (ORE-PR005)	1	34
c.	Condensate Polisher Sump Discharge (ORE-PR041)	1	34
2.	Radioactivity Monitors Providing Alarm But Not Providing Automatic Termination of Release		
a.	Essential Service Water		
	1) Unit 1		
	a) RCFC 1A and 1C Outlet (1RE-PR002)	1	32
	b) RCFC 1B and 1D Outlet (1RE-PR003)	1	32
	2) Unit 2		
	a) RCFC 2A and 2C Outlet (2RE-PR002)	1	32
	b) RCFC 2B and 2D Outlet (2RE-PR003)	1	32
	b. Station Blowdown Line (ORE-PR010)	1	32
3.	Flow Rate Measurement Devices		
a.	Liquid Radwaste Effluent Line (Loop-WX001)	1	33
b.	Liquid Radwaste Effluent Low Flow Line (Loop-WX630)	1	33
c.	Station Blowdown Line (Loop-CW032)	1	33

TABLE 4.3-8  
RADIOACTIVE LIQUID EFFLUENT MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>INSTRUMENT</u>	<u>CHANNEL CHECK</u>	<u>SOURCE CHECK</u>	<u>CHANNEL CALIBRATION</u>	<u>DIGITAL CHANNEL OPERATIONAL TEST</u>	<u>ANALOG CHANNEL OPERATIONAL TEST</u>
1. Radioactivity Monitors Providing Alarm and Automatic Termination of Release					
a. Liquid Radwaste Effluent Line (ORE-PR001)	D	P	R(3) <sup>#</sup>	Q(1)	N.A.
b. Fire and Oil Sump Discharge (ORE-PR005)	D	M	R(3)	Q(1)	N.A.
c. Condensate Polisher Sump Discharge (ORE-PR041)	D	M	R(3)	Q(1)	N.A.
2. Radioactivity Monitors Providing Alarm But Not Providing Automatic Termination of Release					
a. Essential Service Water					
1) Unit 1					
a) RCFC 1A and 1C Outlet (1RE-PR002)	D	M	R(3) <sup>#</sup>	Q(2)	N.A.
b) RCFC 1B and 1D Outlet (1RE-PR003)	D	M	R(3) <sup>#</sup>	Q(2)	N.A.
2) Unit 2					
a) RCFC 2A and 2C Outlet (2RE-PR002)	D	M	R(3) <sup>#</sup>	Q(2)	N.A.
b) RCFC 2B and 2D Outlet (2RE-PR003)	D	M	R(3) <sup>#</sup>	Q(2)	N.A.
b. Station Blowdown Line (ORE-PR010)	D	M	R(3) <sup>#</sup>	Q(2)	N.A.
3. Flow Rate Measurement Devices					
a. Liquid Radwaste Effluent Line (Loop-WX001)	D(4)	N.A.	R <sup>#</sup>	N.A.	Q
b. Liquid Radwaste Effluent Low Flow Line (Loop WX630)	D(4)	N.A.	R	N.A.	Q
c. Station Blowdown Line (Loop-CW032)	D(4)	N.A.	R	N.A.	Q



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. 11  
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 January 12, 1988, 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-72 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A as revised through Amendment No. 11 and the Environment 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

  
for

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: August 5, 1988



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. 11  
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 January 12, 1988, 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-77 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A as revised through Amendment No. 11 and the Environment Protection Plan contained in Appendix B, both of which are 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

*J. H. O'Brien*  
for

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: August 5, 1988

ATTACHMENT TO LICENSE AMENDMENT NOS. 11 AND 11  
FACILITY OPERATING LICENSE NOS. NPF-72 AND NPF-77  
DOCKET NOS. 50-456 AND 50-457

Revise Appendix A as follows:

Remove Pages

3/4 3-60

3/4 3-62

Insert Pages

3/4 3-60

3/4 3-62



TABLE 3.3-12

RADIOACTIVE LIQUID EFFLUENT MONITORING INSTRUMENTATION

<u>INSTRUMENT</u>	<u>MINIMUM CHANNELS OPERABLE</u>	<u>ACTION</u>
1. Radioactivity Monitors Providing Alarm and Automatic Termination of Release		
a. Liquid Radwaste Effluent Line (ORE-PR001)	1	31
b. Fire and Oil Sump (ORE-PR005)	1	34
c. Condensate Polisher Sump Discharge (ORE-PR041)	1	34
2. Radioactivity Monitors Providing Alarm But Not Providing Automatic Termination of Release		
a. Essential Service Water		
1) Unit 1		
a) RCFC 1A and 1C Outlet (1RE-PR002)	1	32
b) RCFC 1B and 1D Outlet (1RE-PR003)	1	32
2) Unit 2		
a) RCFC 2A and 2C Outlet (2RE-PR002)	1	32
b) RCFC 2B and 2D Outlet (2RE-PR003)	1	32
b. Station Blowdown Line (ORE-PR010)	1	32
3. Flow Rate Measurement Devices		
a. Liquid Radwaste Effluent Line (Loop-WX001)	1	33
b. Liquid Radwaste Effluent Low Flow Line (Loop-WX630)	1	33
c. Station Blowdown Line (Loop-CW032)	1	33

TABLE 4.3-8  
RADIOACTIVE LIQUID EFFLUENT MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>INSTRUMENT</u>	<u>CHANNEL CHECK</u>	<u>SOURCE CHECK</u>	<u>CHANNEL CALIBRATION</u>	<u>DIGITAL CHANNEL OPERATIONAL TEST</u>	<u>ANALOG CHANNEL OPERATIONAL TEST</u>
1. Radioactivity Monitors Providing Alarm and Automatic Termination of Release					
a. Liquid Radwaste Effluent Line (ORE-PR001)	D	P	R(3)#	Q(1)	N.A.
b. Fire and Oil Sump Discharge (ORE-PR005)	D	M	R(3)	Q(1)	N.A.
c. Condensate Polisher Sump Discharge (ORE-PR041)	D	M	R(3)	Q(1)	N.A.
2. Radioactivity Monitors Providing Alarm But Not Providing Automatic Termination of Release					
a. Essential Service Water					
1) Unit 1					
a) RCFC 1A and 1C Outlet (1RE-PR002)	D	M	R(3)#	Q(2)	N.A.
b) RCFC 1B and 1D Outlet (1RE-PR003)	D	M	R(3)#	Q(2)	N.A.
2) Unit 2					
a) RCFC 2A and 2C Outlet (2RE-PR002)	D	M	R(3)#	Q(2)	N.A.
b) RCFC 2B and 2D Outlet (2RE-PR003)	D	M	R(3)#	Q(2)	N.A.
b. Station Blowdown Line (ORE-PR010)	D	M	R(3)#	Q(2)	N.A.
3. Flow Rate Measurement Devices					
a. Liquid Radwaste Effluent Line (Loop-WX001)	D(4)	N.A.	R#	N.A.	Q
b. Liquid Radwaste Effluent Low Flow Line (Loop WX630)	D(4)	N.A.	R	N.A.	Q
c. Station Blowdown Line (Loop-CW032)	D(4)	N.A.	R	N.A.	Q



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
SUPPORTING TO AMENDMENT NOS. 22 TO FACILITY OPERATING LICENSE

NOS. NPF-37, NPF-66

AND AMENDMENT NO. 11 TO FACILITY OPERATING LICENSE

NOS. NPF-72, NPF-77

COMMONWEALTH EDISON COMPANY

BYRON STATION, UNITS 1 AND 2

DOCKET NOS. 50-454 AND 50-455

BRAIDWOOD STATION, UNITS 1 AND 2

DOCKET NOS. 50-456 AND 50-457

1.0 INTRODUCTION

By letter dated January 12, 1988, Commonwealth Edison Company, the licensee, made application for amendment to Facility Operating License Nos. NPF-37 and NPF-66 for the Byron Nuclear Plant Units No. 1 and No. 2, and to Facility Operating License Nos. NPF-72 and NPF-77 for the Braidwood Nuclear Plant Units No. 1 and No. 2. The proposed changes concern revisions to the Technical Specifications (TS) to modify the existing liquid radwaste effluent line flow monitor.

A Notice of Consideration of Issuance of Amendment to Facility Operating License and Proposed No Significant Hazards Consideration Determination and Opportunity for Hearing related to the requested action was published in the Federal Register on March 9, 1988 (53 FR 7587). No requests for hearing and no public comments were received.

2.0 EVALUATION

The licensee has proposed to add a new liquid radwaste discharge flowrate monitor to TS Table 3.3-12 and TS Table 4.3-8, which specify radioactive liquid effluent monitoring instrumentation operability and surveillance requirements, respectively. The TS changes would reflect the licensee's modification of their existing liquid radwaste effluent line flow rate monitoring system, involving installation of a 3-inch diameter bypass line containing a flow element and accompanying flow control/isolation valves. The modification, which will bypass the existing flow element mounted in the 6-inch discharge line, will provide more accurate measurement of low flow rates (0-150 gpm). The added bypass flow element will perform the same functions as the existing

flow element, but it will be more accurate at low flow rates. Keylocks on the isolation valve operator switches will be used to assure that only one flow loop is used at a time. The existing radiation monitor will provide isolation signals on high radiation to the new bypass line isolation valves in addition to the existing isolation valves.

The staff's review of the above proposed change indicates that the proposal is acceptable and does not affect the reliability or operability of safety systems as required for safe plant operation, shutdown, or accident mitigation.

The staff finds the above changes acceptable.

### 3.0 ENVIRONMENTAL DETERMINATION

This amendment relates to an upgrading of liquid radioactive effluent flow monitoring capabilities and thus changes an inspection or surveillance requirement. There is no significant hazards consideration, there is no change in the types or increase in the amounts of any effluent that may be released offsite, and there is no significant increase in individual or cumulative occupational radiation exposure. Accordingly, this amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of this amendment.

### 4.0 CONCLUSION

The staff has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of this amendment will not be inimical to the common defense and security.

### 5.0 ACKNOWLEDGEMENT

This evaluation was prepared by L. R. Greger, Region III.

Dated: August 5, 1988

(2) Technical Specifications

The Technical Specifications contained in Appendix A as revised through Amendment No. 11 and the Environment Protection Plan contained in Appendix B, both of which are 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

  
for

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: August 5, 1988

ATTACHMENT TO LICENSE AMENDMENT NOS. 11 AND 11  
FACILITY OPERATING LICENSE NOS. NPF-72 AND NPF-77  
DOCKET NOS. 50-456 AND 50-457

Revise Appendix A as follows:

<u>Remove Pages</u>	<u>Insert Pages</u>
3/4 3-60	3/4 3-60
3/4 3-62	3/4 3-62

TABLE 3.3-12

RADIOACTIVE LIQUID EFFLUENT MONITORING INSTRUMENTATION

<u>INSTRUMENT</u>	<u>MINIMUM CHANNELS OPERABLE</u>	<u>ACTION</u>
1. Radioactivity Monitors Providing Alarm and Automatic Termination of Release		
a. Liquid Radwaste Effluent Line (ORE-PR001)	1	31
b. Fire and Oil Sump (ORE-PR005)	1	34
c. Condensate Polisher Sump Discharge (ORE-PR041)	1	34
2. Radioactivity Monitors Providing Alarm But Not Providing Automatic Termination of Release		
a. Essential Service Water		
1) Unit 1		
a) RCFC 1A and 1C Outlet (1RE-PR002)	1	32
b) RCFC 1B and 1D Outlet (1RE-PR003)	1	32
2) Unit 2		
a) RCFC 2A and 2C Outlet (2RE-PR002)	1	32
b) RCFC 2B and 2D Outlet (2RE-PR003)	1	32
b. Station Blowdown Line (ORE-PR010)	1	32
3. Flow Rate Measurement Devices		
a. Liquid Radwaste Effluent Line (Loop-WX001)	1	33
b. Liquid Radwaste Effluent Low Flow Line (Loop-WX630)	1	33
c. Station Blowdown Line (Loop-CW032)	1	33

TABLE 4.3-8  
RADIOACTIVE LIQUID EFFLUENT MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>INSTRUMENT</u>		<u>CHANNEL CHECK</u>	<u>SOURCE CHECK</u>	<u>CHANNEL CALIBRATION</u>	<u>DIGITAL CHANNEL OPERATIONAL TEST</u>	<u>ANALOG CHANNEL OPERATIONAL TEST</u>
1.	Radioactivity Monitors Providing Alarm and Automatic Termination of Release					
a.	Liquid Radwaste Effluent Line (ORE-PR001)	D	P	R(3)#	Q(1)	N.A.
b.	Fire and Oil Sump Discharge (ORE-PR005)	D	M	R(3)	Q(1)	N.A.
c.	Condensate Polisher Sump Discharge (ORE-PR041)	D	M	R(3)	Q(1)	N.A.
2.	Radioactivity Monitors Providing Alarm But Not Providing Automatic Termination of Release					
a.	Essential Service Water					
	1) Unit 1					
	a) RCFC 1A and 1C Outlet (1RE-PR002)	D	M	R(3)#	Q(2)	N.A.
	b) RCFC 1B and 1D Outlet (1RE-PR003)	D	M	R(3)#	Q(2)	N.A.
	2) Unit 2					
	a) RCFC 2A and 2C Outlet (2RE-PR002)	D	M	R(3)#	Q(2)	N.A.
	b) RCFC 2B and 2D Outlet (2RE-PR003)	D	M	R(3)#	Q(2)	N.A.
b.	Station Blowdown Line (ORE-PR010)	D	M	R(3)#	Q(2)	N.A.
3.	Flow Rate Measurement Devices					
a.	Liquid Radwaste Effluent Line (Loop-WX001)	D(4)	N.A.	R#	N.A.	Q
b.	Liquid Radwaste Effluent Low Flow Line (Loop WX630)	D(4)	N.A.	R	N.A.	Q
c.	Station Blowdown Line (Loop-CW032)	D(4)	N.A.	R	N.A.	Q





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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
SUPPORTING TO AMENDMENT NOS. 22 TO FACILITY OPERATING LICENSE

NOS. NPF-37, NPF-66

AND AMENDMENT NO. 11 TO FACILITY OPERATING LICENSE

NOS. NPF-72, NPF-77

COMMONWEALTH EDISON COMPANY

BYRON STATION, UNITS 1 AND 2

DOCKET NOS. 50-454 AND 50-455

BRAIDWOOD STATION, UNITS 1 AND 2

DOCKET NOS. 50-456 AND 50-457

1.0 INTRODUCTION

By letter dated January 12, 1988, Commonwealth Edison Company, the licensee, made application for amendment to Facility Operating License Nos. NPF-37 and NPF-66 for the Byron Nuclear Plant Units No. 1 and No. 2, and to Facility Operating License Nos. NPF-72 and NPF-77 for the Braidwood Nuclear Plant Units No. 1 and No. 2. The proposed changes concern revisions to the Technical Specifications (TS) to modify the existing liquid radwaste effluent line flow monitor.

A Notice of Consideration of Issuance of Amendment to Facility Operating License and Proposed No Significant Hazards Consideration Determination and Opportunity for Hearing related to the requested action was published in the Federal Register on March 9, 1988 (53 FR 7587). No requests for hearing and no public comments were received.

2.0 EVALUATION

The licensee has proposed to add a new liquid radwaste discharge flowrate monitor to TS Table 3.3-12 and TS Table 4.3-8, which specify radioactive liquid effluent monitoring instrumentation operability and surveillance requirements, respectively. The TS changes would reflect the licensee's modification of their existing liquid radwaste effluent line flow rate monitoring system, involving installation of a 3-inch diameter bypass line containing a flow element and accompanying flow control/isolation valves. The modification, which will bypass the existing flow element mounted in the 6-inch discharge line, will provide more accurate measurement of low flow rates (0-150 gpm). The added bypass flow element will perform the same functions as the existing

flow element, but it will be more accurate at low flow rates. Keylocks on the isolation valve operator switches will be used to assure that only one flow loop is used at a time. The existing radiation monitor will provide isolation signals on high radiation to the new bypass line isolation valves in addition to the existing isolation valves.

The staff's review of the above proposed change indicates that the proposal is acceptable and does not affect the reliability or operability of safety systems as required for safe plant operation, shutdown, or accident mitigation.

The staff finds the above changes acceptable.

### 3.0 ENVIRONMENTAL DETERMINATION

This amendment relates to an upgrading of liquid radioactive effluent flow monitoring capabilities and thus changes an inspection or surveillance requirement. There is no significant hazards consideration, there is no change in the types or increase in the amounts of any effluent that may be released offsite, and there is no significant increase in individual or cumulative occupational radiation exposure. Accordingly, this amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of this amendment.

### 4.0 CONCLUSION

The staff has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of this amendment will not be inimical to the common defense and security.

### 5.0 ACKNOWLEDGEMENT

This evaluation was prepared by L. R. Greger, Region III.

Dated: August 5, 1988

Document Name:  
BYRON 1 AMEND 7/12

Requestor's ID:  
OT1

Author's Name:  
Olshan/Sands

Document Comments:  
Byron 1 Amendment