

July 10, 1997

Ms. Irene Johnson, Acting Manager
Nuclear Regulatory Services
Commonwealth Edison Company
Executive Towers West III
1400 Opus Place, Suite 500
Downers Grove, IL 60515

SUBJECT: ISSUANCE OF AMENDMENTS (TAC NOS. M97841, M97842, M97843 AND M97844)

Dear Ms. Johnson:

The U.S. Nuclear Regulatory Commission (Commission) has issued the enclosed Amendment No. 91 to Facility Operating License No. NPF-37 and Amendment No. 90 to Facility Operating License No. NPF-66 for the Byron Station, Unit Nos. 1 and 2, respectively, and Amendment No. 84 to Facility Operating License No. NPF-72 and Amendment No. 83 to Facility Operating License No. NPF-77 for the Braidwood Station, Unit Nos. 1 and 2, respectively. The amendments are in response to your application dated January 20, 1997.

The amendments revise Technical Specification (TS) 3.6.3, "Containment Isolation Valves," to reflect modifications associated with steam generator replacement for Unit 1 of each station. TS Table 3.6-1, "Containment Isolation Valves," will be modified to reflect the deletion of feedwater bypass valves and reassignment of certain isolation valves to different containment penetrations. TS pages for Unit 2 of each station are affected because Units 1 and 2 share common TS pages.

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

Sincerely,

Original signed by:

George F. Dick, Senior Project Manager
Project Directorate III-2
Division of Reactor Projects - III/IV
Office of Nuclear Reactor Regulation

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

Enclosures: 1. Amendment No. 91 to NPF-37
2. Amendment No. 90 to NPF-66
3. Amendment No. 84 to NPF-72
4. Amendment No. 83 to NPF-77
5. Safety Evaluation

cc w/encls: see next page

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CP-1

I. Johnson
Commonwealth Edison Company

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

COMMONWEALTH EDISON COMPANY

DOCKET NO. STN 50-454

BYRON STATION, UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 91
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 20, 1997, 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:

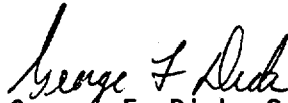
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PDR ADOCK 05000454
P PDR

(2) Technical Specifications

The Technical Specifications contained in Appendix A as revised through Amendment No. 91 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 and shall be implemented within 30 days.

FOR THE NUCLEAR REGULATORY COMMISSION



George F. Dick, Senior Project Manager
Project Directorate III-2
Division of Reactor Projects - III/IV
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: July 10, 1997



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

COMMONWEALTH EDISON COMPANY

DOCKET NO. STN 50-455

BYRON STATION, UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 90
License No. NPF-66

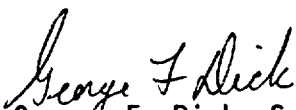
1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Commonwealth Edison Company (the licensee) dated January 20, 1997, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules 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. 9D 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 and shall be implemented within 30 days.

FOR THE NUCLEAR REGULATORY COMMISSION



George F. Dick, Senior Project Manager
Project Directorate III-2
Division of Reactor Projects - III/IV
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: July 10, 1997

ATTACHMENT TO LICENSE AMENDMENT NOS. 91 AND 90
FACILITY OPERATING LICENSE NOS. NPF-37 AND NPF-66
DOCKET NOS. STN 50-454 AND 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.

Remove Pages

3/4 6-21
3/4 6-22
3/4 6-23
3/4 6-24

Insert Pages

3/4 6-21
3/4 6-22
3/4 6-23
3/4 6-24

TABLE 3.6-1 (Continued)
CONTAINMENT ISOLATION VALVES

<u>PENETRATION</u>	<u>VALVE NO.</u>	<u>FUNCTION</u>	<u>MAXIMUM ISOLATION TIME (SEC)</u>
6. <u>Main Steam Isolation (Continued)</u>			
85	MS101B*	Main Steam	6
86	MS101C*	Main Steam	6
7. <u>Feedwater Isolation</u>			
76	FW009D*	Main Feedwater	5
76	FW043D*##	Main Feedwater	6
79	FW009A*	Main Feedwater	5
79	FW043A*##	Main Feedwater	6
84	FW009B*	Main Feedwater	5
84	FW043B*##	Main Feedwater	6
87	FW009C*	Main Feedwater	5
87	FW043C*##	Main Feedwater	6
99##(76)***	FW035D*	Main Feedwater	6
99##(76)***	FW039D*	Main Feedwater	6
100##(79)***	FW035A*	Main Feedwater	6
100##(79)***	FW039A*	Main Feedwater	6
101##(84)***	FW035B*	Main Feedwater	6
101##(84)***	FW039B*	Main Feedwater	6
102##(87)***	FW035C*	Main Feedwater	6
102##(87)***	FW039C*	Main Feedwater	6
8. <u>Remote Manual</u>			
68	RH8701A*,#	RH Suction	N.A.
68	RH8701B*,#	RH Suction	N.A.
75	RH8702A*,#	RH Suction	N.A.
75	RH8702B*,#	RH Suction	N.A.
59	SI8881*	Hot Leg Safety Injection	N.A.
73	SI8824*	Hot Leg Safety Injection	N.A.
66	SI8825*	Hot Leg RH Injection	N.A.
60	SI8823*	Cold Leg Safety Injection	N.A.
50	SI8890A*	Cold Leg RH Injection	N.A.
51	SI8890B*	Cold Leg RH Injection	N.A.
26	SI8843*	Cold Leg Safety Injection	N.A.
33	CV8355A*	RCP Seal Injection	N.A.
33	CV8355D*	RCP Seal Injection	N.A.
53	CV8355B*	RCP Seal Injection	N.A.
53	CV8355C*	RCP Seal Injection	N.A.

TABLE 3.6-1 (Continued)
CONTAINMENT ISOLATION VALVES

<u>PENETRATION</u>	<u>VALVE NO.</u>	<u>FUNCTION</u>	<u>MAXIMUM ISOLATION TIME (SEC)</u>
8. <u>Remote Manual</u> (Continued)			
59	SI8802A*	Hot Leg Safety Injection	N.A.
73	SI8802B*	Hot Leg Safety Injection	N.A.
60	SI8835*	Hot Leg Safety Injection	N.A.
50	SI8809A*	RH Cold Leg Injection	N.A.
51	SI8809B*	RH Cold Leg Injection	N.A.
66	SI8840*	Hot Leg Safety Injection	N.A.
100##(79)***	AF013A*	Feedwater	N.A.
100##(79)***	AF013E*	Feedwater	N.A.
101##(84)***	AF013B*	Feedwater	N.A.
101##(84)***	AF013F*	Feedwater	N.A.
102##(87)***	AF013C*	Feedwater	N.A.
102##(87)***	AF013G*	Feedwater	N.A.
99##(76)***	AF013D*	Feedwater	N.A.
99##(76)***	AF013H*	Feedwater	N.A.
9. <u>Manual</u>			
37	CV8346*	RCS Loop Fill	N.A.
13	VQ016	Instrument Penetration	N.A.
13	VQ017	Instrument Penetration	N.A.
13	VQ018	Instrument Penetration	N.A.
13	VQ019	Instrument Penetration	N.A.
15	RY075	Instrument Penetration	N.A.
30	WM190	Make-Up Demin	N.A.
57	FC009	Spent Fuel Pool Cleaning	N.A.
57	FC010	Spent Fuel Pool Cleaning	N.A.
32	FC011	Spent Fuel Pool Cleaning	N.A.
32	FC012	Spent Fuel Pool Cleaning	N.A.
77	MS021D*,#	Main Steam	N.A.
78	MS021A*,#	Main Steam	N.A.
85	MS021B*,#	Main Steam	N.A.
86	MS021C*,#	Main Steam	N.A.
AL	PR002E#	Process Radiation	N.A.
AL	PR033A#	Process Radiation	N.A.
AL	PR033B#	Process Radiation	N.A.
AL	PR002F#	Process Radiation	N.A.
AL	PR033C#	Process Radiation	N.A.
AL	PR033D#	Process Radiation	N.A.

TABLE 3.6-1 (Continued)
CONTAINMENT ISOLATION VALVES

<u>PENETRATION</u>	<u>VALVE NO.</u>	<u>FUNCTION</u>	<u>MAXIMUM ISOLATION TIME (SEC)</u>
9. <u>Manual</u> (Continued)			
99	FW015D*,#	Feedwater##(Steam Generator Recirculation)***	N.A.
100	FW015A*,#	Feedwater##(Steam Generator Recirculation)***	N.A.
101	FW015B*,#	Feedwater##(Steam Generator Recirculation)***	N.A.
102	FW015C*,#	Feedwater##(Steam Generator Recirculation)***	N.A.
10. <u>Check</u>			
28	CV8113	RCP Seal Water Return	N.A.
37	CV8348*	RCS Loop Fill	N.A.
6	W0007A	Chilled Water	N.A.
10	W0007B	Chilled Water	N.A.
21	CC9534	RCP Mtr Brng Return	N.A.
24	CC9518	RCP Thermal Barrier Return	N.A.
25	CC9486	RCP Cooling Wtr Supply	N.A.
1	CS008A	Containment Spray	N.A.
16	CS008B	Containment Spray	N.A.
39	IA091	Instrument Air	N.A.
30	WM191	Make-Up Demin	N.A.
52	PR032	Process Radiation	N.A.
AL	PR002G	Process Radiation	N.A.
AL	PR002H	Process Radiation	N.A.
12	PS231A	Hydrogen Monitor	N.A.
31	PS231B	Hydrogen Monitor	N.A.
27	RY8047	PRT Nitrogen	N.A.
44	RY8046	PRT Make-Up	N.A.
26	SI8815*	Safety Injection	N.A.
50	SI8818A*	Safety Injection	N.A.
50	SI8818D*	Safety Injection	N.A.
51	SI8818B*	Safety Injection	N.A.
51	SI8818C*	Safety Injection	N.A.
59	SI8905A*	Safety Injection	N.A.
59	SI8905D*	Safety Injection	N.A.
60	SI8819A*	Safety Injection	N.A.
60	SI8819B*	Safety Injection	N.A.

TABLE 3.6-1 (Continued)
CONTAINMENT ISOLATION VALVES

<u>PENETRATION</u>	<u>VALVE NO.</u>	<u>FUNCTION</u>	<u>MAXIMUM ISOLATION TIME (SEC)</u>
<u>10. Check (Continued)</u>			
60	SI8819C*	Safety Injection	N.A.
60	SI8819D*	Safety Injection	N.A.
66	SI8841A*	Safety Injection	N.A.
66	SI8841B*	Safety Injection	N.A.
73	SI8905B*	Safety Injection	N.A.
73	SI8905C*	Safety Injection	N.A.
55	SI8968	Safety Injection	N.A.
34	FP345*	Fire Protection	N.A.
33	CV8368A*	RCP Seal Injection	N.A.
33	CV8368D*	RCP Seal Injection	N.A.
53	CV8368B*	RCP Seal Injection	N.A.
53	CV8368C*	RCP Seal Injection	N.A.
<u>11. S/G Safeties/PORVs</u>			
77	MS013D*	Main Steam	N.A.
77	MS014D*	Main Steam	N.A.
77	MS015D*	Main Steam	N.A.
77	MS016D*	Main Steam	N.A.
77	MS017D*	Main Steam	N.A.
78	MS013A*	Main Steam	N.A.
78	MS014A*	Main Steam	N.A.
78	MS015A*	Main Steam	N.A.
78	MS016A*	Main Steam	N.A.
78	MS017A*	Main Steam	N.A.
85	MS013B*	Main Steam	N.A.
85	MS014B*	Main Steam	N.A.
85	MS015B*	Main Steam	N.A.
85	MS016B*	Main Steam	N.A.
85	MS017B*	Main Steam	N.A.
86	MS013C*	Main Steam	N.A.
86	MS014C*	Main Steam	N.A.
86	MS015C*	Main Steam	N.A.
86	MS016C*	Main Steam	N.A.
86	MS017C*	Main Steam	N.A.
77	MS018D*	Main Steam	20
78	MS018A*	Main Steam	20
85	MS018B*	Main Steam	20
86	MS018C*	Main Steam	20

*Not subject to Type C leakage tests.

**Proper valve operation will be demonstrated by verifying that the valve strokes to its required position.

***Not applicable to Unit 2. Applicable to Unit 1 after Cycle 8.

#May be opened on an intermittent basis under administrative control.

##Applicable to Unit 1 through Cycle 8 and to Unit 2.



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

COMMONWEALTH EDISON COMPANY

DOCKET NO. STN 50-456

BRAIDWOOD STATION, UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 84
License No. NPF-72

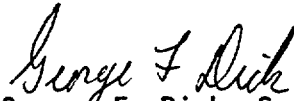
1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Commonwealth Edison Company (the licensee) dated January 20, 1997, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules 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. 84 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 and shall be implemented within 30 days.

FOR THE NUCLEAR REGULATORY COMMISSION



George F. Dick, Senior Project Manager
Project Directorate III-2
Division of Reactor Projects - III/IV
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: July 10, 1997



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

COMMONWEALTH EDISON COMPANY

DOCKET NO. STN 50-457

BRAIDWOOD STATION, UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 83
License No. NPF-77

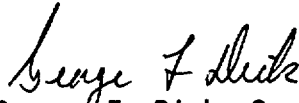
1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Commonwealth Edison Company (the licensee) dated January 20, 1997, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules 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-77 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A as revised through Amendment No. 83 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 and shall be implemented within 30 days.

FOR THE NUCLEAR REGULATORY COMMISSION



George F. Dick, Senior Project Manager
Project Directorate III-2
Division of Reactor Projects - III/IV
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: July 10, 1997

ATTACHMENT TO LICENSE AMENDMENT NOS. 84 AND 83
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

3/4 6-21
3/4 6-22
3/4 6-23
3/4 6-24

Insert Pages

3/4 6-21
3/4 6-22
3/4 6-23
3/4 6-24

TABLE 3.6-1 (Continued)
CONTAINMENT ISOLATION VALVES

<u>PENETRATION</u>	<u>VALVE NO.</u>	<u>FUNCTION</u>	<u>MAXIMUM ISOLATION TIME (SEC)</u>
<u>6. Main Steam Isolation (Continued)</u>			
85	MS101B*	Main Steam	6
86	MS101C*	Main Steam	6
<u>7. Feedwater Isolation</u>			
76	FW009D*	Main Feedwater	5
76	FW043D***	Main Feedwater	6
79	FW009A*	Main Feedwater	5
79	FW043A***	Main Feedwater	6
84	FW009B*	Main Feedwater	5
84	FW043B***	Main Feedwater	6
87	FW009C*	Main Feedwater	5
87	FW043C***	Main Feedwater	6
99##(76)***	FW035D*	Main Feedwater	6
99##(76)***	FW039D*	Main Feedwater	6
100##(79)***	FW035A*	Main Feedwater	6
100##(79)***	FW039A*	Main Feedwater	6
101##(84)***	FW035B*	Main Feedwater	6
101##(84)***	FW039B*	Main Feedwater	6
102##(87)***	FW035C*	Main Feedwater	6
102##(87)***	FW039C*	Main Feedwater	6
<u>8. Remote Manual</u>			
68	RH8701A*,#	RH Suction	N.A.
68	RH8701B*,#	RH Suction	N.A.
75	RH8702A*,#	RH Suction	N.A.
75	RH8702B*,#	RH Suction	N.A.
59	SI8881*	Hot Leg Safety Injection	N.A.
73	SI8824*	Hot Leg Safety Injection	N.A.
66	SI8825*	Hot Leg RH Injection	N.A.
60	SI8823*	Cold Leg Safety Injection	N.A.
50	SI8890A*	Cold Leg RH Injection	N.A.
51	SI8890B*	Cold Leg RH Injection	N.A.
26	SI8843*	Cold Leg Safety Injection	N.A.
33	CV8355A*	RCP Seal Injection	N.A.
33	CV8355D*	RCP Seal Injection	N.A.
53	CV8355B*	RCP Seal Injection	N.A.
53	CV8355C*	RCP Seal Injection	N.A.

TABLE 3.6-1 (Continued)
CONTAINMENT ISOLATION VALVES

<u>PENETRATION</u>	<u>VALVE NO.</u>	<u>FUNCTION</u>	<u>MAXIMUM ISOLATION TIME (SEC)</u>
8. <u>Remote Manual</u> (Continued)			
59	SI8802A*	Hot Leg Safety Injection	N.A.
73	SI8802B*	Hot Leg Safety Injection	N.A.
60	SI8835*	Hot Leg Safety Injection	N.A.
50	SI8809A*	RH Cold Leg Injection	N.A.
51	SI8809B*	RH Cold Leg Injection	N.A.
66	SI8840*	Hot Leg Safety Injection	N.A.
100##(79)***	AF013A*	Feedwater	N.A.
100##(79)***	AF013E*	Feedwater	N.A.
101##(84)***	AF013B*	Feedwater	N.A.
101##(84)***	AF013F*	Feedwater	N.A.
102##(87)***	AF013C*	Feedwater	N.A.
102##(87)***	AF013G*	Feedwater	N.A.
99##(76)***	AF013D*	Feedwater	N.A.
99##(76)***	AF013H*	Feedwater	N.A.
9. <u>Manual</u>			
37	CV8346*	RCS Loop Fill	N.A.
I3	VQ016	Instrument Penetration	N.A.
I3	VQ017	Instrument Penetration	N.A.
I3	VQ018	Instrument Penetration	N.A.
I3	VQ019	Instrument Penetration	N.A.
I5	RY075	Instrument Penetration	N.A.
30	WM190	Make-Up Demin	N.A.
57	FC009	Spent Fuel Pool Cleaning	N.A.
57	FC010	Spent Fuel Pool Cleaning	N.A.
32	FC011	Spent Fuel Pool Cleaning	N.A.
32	FC012	Spent Fuel Pool Cleaning	N.A.
77	MS021D*,#	Main Steam	N.A.
78	MS021A*,#	Main Steam	N.A.
85	MS021B*,#	Main Steam	N.A.
86	MS021C*,#	Main Steam	N.A.
AL	PR002E#	Process Radiation	N.A.
AL	PR033A#	Process Radiation	N.A.
AL	PR033B#	Process Radiation	N.A.
AL	PR002F#	Process Radiation	N.A.
AL	PR033C#	Process Radiation	N.A.
AL	PR033D#	Process Radiation	N.A.

TABLE 3.6-1 (Continued)
CONTAINMENT ISOLATION VALVES

<u>PENETRATION</u>	<u>VALVE NO.</u>	<u>FUNCTION</u>	<u>MAXIMUM ISOLATION TIME (SEC)</u>
9. <u>Manual</u> (Continued)			
99	FW015D*,#	Feedwater##(Steam Generator Recirculation)***	N.A.
100	FW015A*,#	Feedwater##(Steam Generator Recirculation)***	N.A.
101	FW015B*,#	Feedwater##(Steam Generator Recirculation)***	N.A.
102	FW015C*,#	Feedwater##(Steam Generator Recirculation)***	N.A.
10. <u>Check</u>			
28	CV8113	RCP Seal Water Return	N.A.
37	CV8348*	RCS Loop Fill	N.A.
6	W0007A	Chilled Water	N.A.
10	W0007B	Chilled Water	N.A.
21	CC9534	RCP Mtr Brng Return	N.A.
24	CC9518	RCP Thermal Barrier Return	N.A.
25	CC9486	RCP Cooling Wtr Supply	N.A.
1	CS008A	Containment Spray	N.A.
16	CS008B	Containment Spray	N.A.
39	IA091	Instrument Air	N.A.
30	WM191	Make-Up Demin	N.A.
52	PR032	Process Radiation	N.A.
AL	PR002G	Process Radiation	N.A.
AL	PR002H	Process Radiation	N.A.
12	PS231A	Hydrogen Monitor	N.A.
31	PS231B	Hydrogen Monitor	N.A.
27	RY8047	PRT Nitrogen	N.A.
44	RY8046	PRT Make-Up	N.A.
26	SI8815*	Safety Injection	N.A.
50	SI8818A*	Safety Injection	N.A.
50	SI8818D*	Safety Injection	N.A.
51	SI8818B*	Safety Injection	N.A.
51	SI8818C*	Safety Injection	N.A.
59	SI8905A*	Safety Injection	N.A.
59	SI8905D*	Safety Injection	N.A.
60	SI8819A*	Safety Injection	N.A.
60	SI8819B*	Safety Injection	N.A.

TABLE 3.6-1 (Continued)
CONTAINMENT ISOLATION VALVES

<u>PENETRATION</u>	<u>VALVE NO.</u>	<u>FUNCTION</u>	<u>MAXIMUM ISOLATION TIME (SEC)</u>
10. <u>Check</u> (Continued)			
60	SI8819C*	Safety Injection	N.A.
60	SI8819D*	Safety Injection	N.A.
66	SI8841A*	Safety Injection	N.A.
66	SI8841B*	Safety Injection	N.A.
73	SI8905B*	Safety Injection	N.A.
73	SI8905C*	Safety Injection	N.A.
55	SI8968	Safety Injection	N.A.
34	FP345*	Fire Protection	N.A.
33	CV8368A*	RCP Seal Injection	N.A.
33	CV8368D*	RCP Seal Injection	N.A.
53	CV8368B*	RCP Seal Injection	N.A.
53	CV8368C*	RCP Seal Injection	N.A.
11. <u>S/G Safeties/PORVs</u>			
77	MS013D*	Main Steam	N.A.
77	MS014D*	Main Steam	N.A.
77	MS015D*	Main Steam	N.A.
77	MS016D*	Main Steam	N.A.
77	MS017D*	Main Steam	N.A.
78	MS013A*	Main Steam	N.A.
78	MS014A*	Main Steam	N.A.
78	MS015A*	Main Steam	N.A.
78	MS016A*	Main Steam	N.A.
78	MS017A*	Main Steam	N.A.
85	MS013B*	Main Steam	N.A.
85	MS014B*	Main Steam	N.A.
85	MS015B*	Main Steam	N.A.
85	MS016B*	Main Steam	N.A.
85	MS017B*	Main Steam	N.A.
86	MS013C*	Main Steam	N.A.
86	MS014C*	Main Steam	N.A.
86	MS015C*	Main Steam	N.A.
86	MS016C*	Main Steam	N.A.
86	MS017C*	Main Steam	N.A.
77	MS018D*	Main Steam	20
78	MS018A*	Main Steam	20
85	MS018B*	Main Steam	20
86	MS018C*	Main Steam	20

*Not subject to Type C leakage tests.

**Proper valve operation will be demonstrated by verifying that the valve strokes to its required position.

***Not applicable to Unit 2. Applicable to Unit 1 after Cycle 7.

#May be opened on an intermittent basis under administrative control.

##Applicable to Unit 1 through Cycle 7 and to Unit 2.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 91 TO FACILITY OPERATING LICENSE NO. NPF-37,
AMENDMENT NO. 90 TO FACILITY OPERATING LICENSE NO. NPF-66,
AMENDMENT NO. 84 TO FACILITY OPERATING LICENSE NO. NPF-72,
AND AMENDMENT NO. 83 TO FACILITY OPERATING LICENSE NO. NPF-77

COMMONWEALTH EDISON COMPANY

BYRON STATION, UNIT NOS. 1 AND 2

BRAIDWOOD STATION, UNIT NOS. 1 AND 2

DOCKET NOS. STN 50-454, STN 50-455, STN 50-456 AND STN 50-457

1.0 INTRODUCTION

By application dated January 20, 1997, Commonwealth Edison Company (ComEd, the licensee), requested changes to Technical Specification (TS) 3.6.3, "Containment Isolation Valves," for the Byron and Braidwood Nuclear Power Stations, Unit 1 and 2. The proposed changes would reflect modifications associated with steam generator (SG) replacements at Byron, Unit 1 and Braidwood, Unit 1. The TSs Table of Isolation Valves would be revised to reflect (a) the deletion of feedwater isolation bypass valves for the replaced SGs, and (b) the reassignment of certain isolation valves to different containment penetrations; consistent with the modifications described below. TS pages for Unit 2 of each station are affected because Units 1 and 2 share common TS pages.

2.0 EVALUATION

ComEd is replacing the original Westinghouse Model D4 SGs at Byron, Unit 1, and Braidwood, Unit 1, with Babcock & Wilcox International (BWI) SGs. As part of the project, parts of the main feedwater and auxiliary feedwater piping will be modified. Feedwater bypass isolation valves will be deleted and different containment penetrations will be used for main feedwater piping. More specifically:

Single feedwater nozzle delivery will replace dual nozzle delivery. The original SGs have two nozzles (one for main feedwater and one for feedwater tempering), whereas the replacement SGs each have a single main feedwater nozzle. The existing Feedwater Tempering containment penetrations will be used for chemical feed and the new wet layup system.

The feedwater isolation valve bypass line required for the original preheater SGs, as part of the Water Hammer Prevention System for limiting preheater vibration, is no longer required. Piping and associated valves will be removed.

Existing Auxiliary Feedwater lines which discharge into the existing Feedwater Tempering lines outside containment will be rerouted to join the Main Feedwater Lines outside containment.

The use of single feedwater nozzle delivery (shared by main and auxiliary feedwater systems) is acceptable under Standard Review Plan (SRP) Section 10.4.9, which specifically indicates that auxiliary feedwater may be delivered to a SG by a separate line or by joining the main feedwater line. The new wet layup system will facilitate maintenance operations and is not anticipated to have any adverse safety consequences or any adverse effects on SG chemistry.

The licensee's application states that the existing isolation provisions conform to General Design Criteria 54 and 57 and that such conformance will not be affected by the modifications nor will isolation instrumentation be changed.

3.0 SUMMARY

Based on the information provided in the application and its finding that the proposed changes are consistent with standard acceptance criteria for feedwater systems and isolation capability, the staff concludes that the proposed TS changes are acceptable.

4.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Illinois State official was notified of the proposed issuance of the amendments. The State official had no comments.

5.0 ENVIRONMENTAL CONSIDERATION

The amendments change a requirement with respect to the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The NRC staff has determined that the amendments involve no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendments involve no significant hazards consideration, and there has been no public comment on such finding (62 FR 11489). Accordingly, the amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendments.

6.0 CONCLUSION

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

Principal Contributor: W. Long

Date: July 10, 1997