

April 18, 1994

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

Mr. D. L. Farrar  
Manager, Nuclear Regulatory Services  
Commonwealth Edison Company  
Executive Towers West III, Suite 500  
1400 OPUS Place  
Downers Grove, Illinois 60515

Dear Mr. Farrar:

DISTRIBUTION:

Docket File	PDIII-2 r/f
NRC & Local PDRs	J. Roe
J. Zwolinski	J. Dyer
H. Dawson	G. Dick
A. Assa	C. Hawes
OGC	D. Hagan
G. Hill (8)	B. Clayton, RIII
C. Grimes	ACRS (10)
OPA	OC/LFDCB
T. Collins	J. Norberg

SUBJECT: ISSUANCE OF AMENDMENTS, BYRON STATION, UNITS 1 AND 2, AND BRAIDWOOD STATION, UNITS 1 AND 2 (TAC NOS. M88968, M88969, M88970, M88971)

The Commission has issued the enclosed Amendment No. 61 to Facility Operating License No. NPF-37 and Amendment No. 61 to Facility Operating License No. NPF-66 for the Byron Station, Unit Nos. 1 and 2, respectively, and Amendment No. 49 to Facility Operating License No. NPF-72 and Amendment No. 49 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 March 21, 1994, as supplemented on March 24, 1994. The requests were treated as exigencies in order to permit the timely startup of Braidwood, Unit 1.

The amendments add a one-time revision to Technical Specification (TS) 3/4.7.1.1 to permit continued activities at all four units with main steam Code safety valve lift setpoint tolerances of ±3%. The duration of this amendment is until May 9, 1994, at which time the tolerances will be reset to ±1%. A statement has also been added to TS 4.7.1.1 for Braidwood stating that the provisions of TS 4.0.4 are not applicable to Braidwood, Unit 1, Cycle 5 until initial entry into Mode 2 from its refueling outage.

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, Jr., Project Manager  
Project Directorate III-2  
Division of Reactor Projects - III/IV  
Office of Nuclear Reactor Regulation

9404210203 940418  
PDR ADOCK 05000454  
P PDR

Enclosures:

1. Amendment No. 61 to NPF-37
2. Amendment No. 61 to NPF-66
3. Amendment No. 49 to NPF-72
4. Amendment No. 49 to NPF-77
5. Safety Evaluation

ENCLOSURE COPY

CP1

2.0. 4/13/94 at 4/13/94

LA:PDIII-2	I:PDIII-2	PM:PDIII-2	PM:PDIII-2	SXRB	EMEB	D:PDIII-2	OGC
CHAWES <i>can</i>	JDAWSON <i>JD</i>	RASSA <i>R</i>	GDICK <i>GD</i>	TCOLLINS	JNORBERG	JDYER	<i>CM</i>
4/12/94	4/12/94	4/13/94	4/12/94	4/12/94	4/13/94	4/18/94	4/15/94
(YES/NO)	(YES/NO)	(YES/NO)	YES/NO	YES/NO		(Yes)	YES/NO

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April 18, 1994

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

Mr. D. L. Farrar  
Manager, Nuclear Regulatory Services  
Commonwealth Edison Company  
Executive Towers West III, Suite 500  
1400 OPUS Place  
Downers Grove, Illinois 60515

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The amendments add a one-time revision to Technical Specification (TS) 3/4.7.1.1 to permit continued activities at all four units with main steam Code safety valve lift setpoint tolerances of ±3%. The duration of this amendment is until May 9, 1994, at which time the tolerances will be reset to ±1%. A statement has also been added to TS 4.7.1.1 for Braidwood stating that the provisions of TS 4.0.4 are not applicable to Braidwood, Unit 1, Cycle 5 until initial entry into Mode 2 from its refueling outage.

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Sincerely,

Original Signed By:

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

**Enclosures:**

1. Amendment No. 61 to NPF-37
2. Amendment No. 61 to NPF-66
3. Amendment No. 49 to NPF-72
4. Amendment No. 49 to NPF-77
5. Safety Evaluation

2.0  
4/13/94

at 3/13/94

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4/12/94	4/12/94	4/13/94	4/14/94	4/12/94	4/12/94	4/18/94	4/15/94
(YES/NO)	(YES/NO)	(YES/NO)	YES/NO	YES/NO		(Yes)	YES/NO



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

April 18, 1994

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

Mr. D. L. Farrar  
Manager, Nuclear Regulatory Services  
Commonwealth Edison Company  
Executive Towers West III, Suite 500  
1400 OPUS Place  
Downers Grove, Illinois 60515

Dear Mr. Farrar:

SUBJECT: ISSUANCE OF AMENDMENTS, BYRON STATION, UNITS 1 AND 2, AND BRAIDWOOD STATION, UNITS 1 AND 2 (TAC NOS. M88968, M88969, M88970, M88971)

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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,

A handwritten signature in cursive script that reads "George F. Dick Jr".

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

Enclosures:

1. Amendment No. 61 to NPF-37
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5. Safety Evaluation



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. 61  
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 March 21, 1994, as supplemented on March 24, 1994, 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:

(2) Technical Specifications

The Technical Specifications contained in Appendix A as revised through Amendment No. 61 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



James E. Dyer, Director  
Project Directorate III-2  
Division of Reactor Projects - III/IV  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: April 18, 1994



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. 61  
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 March 21, 1994, as supplemented on March 24, 1994, 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. 61 and revised by Attachment 2 to NPF-66, and the Environmental Protection Plan contained in Appendix B, both of which were attached to License No. NPF-37, dated February 14, 1985, are hereby incorporated into this license. Attachment 2 contains a revision to Appendix A which is hereby incorporated into this license. The licensee shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

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

FOR THE NUCLEAR REGULATORY COMMISSION



James E. Dyer, Director  
Project Directorate III-2  
Division of Reactor Projects - III/IV  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: April 18, 1994

ATTACHMENT TO LICENSE AMENDMENT NOS. 61 AND 61

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 7-3

Insert Pages

3/4 7-3

TABLE 3.7-2  
STEAM LINE SAFETY VALVES PER LOOP

<u>VALVE NUMBER</u>	<u>LIFT SETTING (<math>\pm 1\%</math>)*#</u>	<u>ORIFICE SIZE</u>
MS013(A-D)	1235 psig	16 in <sup>2</sup>
MS014(A-D)	1220 psig	16 in <sup>2</sup>
MS015(A-D)	1205 psig	16 in <sup>2</sup>
MS016(A-D)	1190 psig	16 in <sup>2</sup>
MS017(A-D)	1175 psig	16 in <sup>2</sup>

\*The lift setting pressure shall correspond to ambient conditions of the valve at nominal operating temperature and pressure.

#Main Steam line Code safety valve lift settings may have a  $\pm 3\%$  tolerance until May 9, 1994, by which time the lift settings will be reset to  $\pm 1\%$ .

## PLANT SYSTEMS

### AUXILIARY FEEDWATER SYSTEM

#### LIMITING CONDITION FOR OPERATION

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3.7.1.2 At least two independent steam generator auxiliary feedwater pumps and associated flow paths shall be OPERABLE with:

- a. One motor-driven auxiliary feedwater pump capable of being powered from an ESF Bus, and
- b. One direct-driven diesel auxiliary feedwater pump capable of being powered from a direct-drive diesel engine and an OPERABLE Diesel Fuel Supply System consisting of a day tank containing a minimum of 420 gallons of fuel.

APPLICABILITY: MODES 1, 2, and 3.

#### ACTION:

- a. With one auxiliary feedwater pump inoperable, restore the required auxiliary feedwater pumps to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours and in HOT SHUTDOWN within the following 6 hours.
- b. With both auxiliary feedwater pumps inoperable, be in at least HOT STANDBY within 6 hours and in HOT SHUTDOWN within the following 6 hours.

#### SURVEILLANCE REQUIREMENTS

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4.7.1.2.1 Each auxiliary feedwater pump shall be demonstrated OPERABLE:

- a. At least once per 31 days on a STAGGERED TEST BASIS by:
  - 1) Verifying that the pump develops a differential pressure of greater than or equal to 1825 psid at a flow of greater than or equal to 85 gpm on the recirculation flow when tested pursuant to Specification 4.0.5;



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. 49  
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 March 21, 1994, as supplemented on March 24, 1994, 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. 49 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



James E. Dyer, Director  
Project Directorate III-2  
Division of Reactor Projects - III/IV  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: April 18, 1994



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. 49  
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 March 21, 1994, as supplemented on March 24, 1994, 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. 49 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



James E. Dyer, Director  
Project Directorate III-2  
Division of Reactor Projects - III/IV  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: April 18, 1994

ATTACHMENT TO LICENSE AMENDMENT NOS. 49 AND 49  
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 7-1  
3/4 7-3

Insert Pages

3/4 7-1  
3/4 7-3

### 3/4.7 PLANT SYSTEMS

#### 3/4.7.1 TURBINE CYCLE

##### SAFETY VALVES

#### LIMITING CONDITION FOR OPERATION

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3.7.1.1 All main steam line Code safety valves associated with each steam generator shall be OPERABLE with lift settings as specified in Table 3.7-2.

APPLICABILITY: MODES 1, 2, and 3.

ACTION:

- a. With four reactor coolant loops and associated steam generators in operation and with one or more main steam line Code safety valves inoperable, operation in MODES 1, 2, and 3 may proceed provided, that within 4 hours, either the inoperable valve is restored to OPERABLE status or the Power Range Neutron Flux High Trip Setpoint is reduced per Table 3.7-1; otherwise, be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- b. The provisions of Specification 3.0.4 are not applicable.

#### SURVEILLANCE REQUIREMENTS

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4.7.1.1 No additional requirements other than those required by Specification 4.0.5. The provisions of Specification 4.0.4 are not applicable for Braidwood, Unit 1, Cycle 5, until the initial entry into MODE 2.

TABLE 3.7-1

MAXIMUM ALLOWABLE POWER RANGE NEUTRON FLUX HIGH SETPOINT WITH  
INOPERABLE STEAM LINE SAFETY VALVES DURING FOUR LOOP OPERATION

MAXIMUM NUMBER OF INOPERABLE  
SAFETY VALVES ON ANY  
OPERATING STEAM GENERATOR

MAXIMUM ALLOWABLE POWER RANGE  
NEUTRON FLUX HIGH SETPOINT  
(PERCENT OF RATED THERMAL POWER)

1	87
2	65
3	43

TABLE 3.7-2

STEAM LINE SAFETY VALVES PER LOOP

<u>VALVE NUMBER</u>	<u>LIFT SETTING (<math>\pm 1\%</math>)*#</u>	<u>ORIFICE SIZE</u>
MS013(A-D)	1235 psig	16 in <sup>2</sup>
MS014(A-D)	1220 psig	16 in <sup>2</sup>
MS015(A-D)	1205 psig	16 in <sup>2</sup>
MS016(A-D)	1190 psig	16 in <sup>2</sup>
MS017(A-D)	1175 psig	16 in <sup>2</sup>

\*The lift setting pressure shall correspond to ambient conditions of the valve at nominal operating temperature and pressure.

#Main steam line Code safety valve lift settings may have a  $\pm 3\%$  tolerance until May 9, 1994, by which time the lift settings will be reset to  $\pm 1\%$ .

## PLANT SYSTEMS

### AUXILIARY FEEDWATER SYSTEM

#### LIMITING CONDITION FOR OPERATION

---

---

3.7.1.2 At least two independent steam generator auxiliary feedwater pumps and associated flow paths shall be OPERABLE with:

- a. One motor-driven auxiliary feedwater pump capable of being powered from an ESF Bus, and
- b. One direct-driven diesel auxiliary feedwater pump capable of being powered from a direct-drive diesel engine and an OPERABLE Diesel Fuel Supply System consisting of a day tank containing a minimum of 420 gallons of fuel.

APPLICABILITY: MODES 1, 2, and 3.

#### ACTION:

- a. With one auxiliary feedwater pump inoperable, restore the required auxiliary feedwater pumps to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours and in HOT SHUTDOWN within the following 6 hours.
- b. With both auxiliary feedwater pumps inoperable, be in at least HOT STANDBY within 6 hours and in HOT SHUTDOWN within the following 6 hours.

#### SURVEILLANCE REQUIREMENTS

---

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4.7.1.2.1 Each auxiliary feedwater pump shall be demonstrated OPERABLE:

- a. At least once per 31 days on a STAGGERED TEST BASIS by:
  - 1) Verifying that the pump develops a differential pressure of greater than or equal to 1825 psid at a flow of greater than or equal to 85 gpm on the recirculation flow when tested pursuant to Specification 4.0.5;



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 61 TO FACILITY OPERATING LICENSE NO. NPF-37,  
AMENDMENT NO. 61 TO FACILITY OPERATING LICENSE NO. NPF-66,  
AMENDMENT NO. 49 TO FACILITY OPERATING LICENSE NO. NPF-72,  
AND AMENDMENT NO. 49 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

On March 10, 1994, Commonwealth Edison Company (CECo, the licensee) requested by telephone that the Commission exercise its discretion not to enforce compliance with the Action requirements of Technical Specification (TS) 3.7.1.1 for Byron Station, Units 1 and 2, and Braidwood Station, Unit 2. This request was made after the licensee was informed by its contractor that the as-left tolerances on the lift setpoints of certain main steam safety valves (MSSVs) were greater than the  $\pm 1\%$  maximum specified by the limiting condition for operation (LCO) of TS 3.7.1.1. The tolerances on the MSSVs at Braidwood, Unit 1 were also found to be greater than  $\pm 1\%$ ; however, the limits of TS 3.7.1.1 did not apply since Braidwood, Unit 1 was in a refueling outage at the time the condition was discovered. TS Action requirement 3.7.1.1.a would have required that the tolerances be reset to within  $\pm 1\%$  in the next 4 hours, or that the plants be in at least HOT STANDBY within the next 6 hours and cold shutdown within the following 30 hours. On the basis of information presented by the licensee, the NRC concluded that continued operation of the plants until the licensee could submit an emergency TS amendment involved minimal or no safety impact, and verbally granted enforcement discretion during the March 10 telephone call. A formal Notice of Enforcement Discretion (NOED) was requested in the licensee's submittal of March 11, 1994. On March 15, 1994, the NRC formally granted the NOED which was to be effective until approval of an emergency TS amendment which was to be submitted no later than March 21, 1994.

By letter dated March 21, 1994, as supplemented on March 24, 1994, the licensee submitted its request for a one-time only Emergency TS amendment to the operating licenses of Byron, Units 1 and 2, and Braidwood, Units 1 and 2. The first of the proposed changes would add a footnote to TS 3.7.1.1,

Table 3.7-2, to allow a tolerance of  $\pm 3\%$  for the MSSV lift setpoints to be acceptable until May 9, 1994, by which time the tolerances would be reset to  $\pm 1\%$ .

A second change would be made to Braidwood TS Surveillance Requirement (SR) 4.7.1.1, by adding a note to relieve Braidwood, Unit 1 of compliance with TS 4.0.4 until it initially enters Operational Mode 2. This change was requested because TS 4.0.4 does not allow entry into an Operational Mode if the surveillance requirements associated with the LCO of TS 3/4.7.1 are not met. However, the surveillance requires that the MSSV setpoints be set at the temperature and pressure corresponding to Operational Mode 3. The change would therefore allow Braidwood, Unit 1 to proceed from its refueling outage to Mode 3 in order to reset the MSSV lift setpoints, and would be applicable only for the upcoming fuel cycle (Cycle 5).

## 2.0 EVALUATION

The MSSVs at Byron and Braidwood were designed and manufactured as Class II components in accordance with the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code, 1971 edition. Testing of the valves is performed in accordance with Section XI of the ASME code. Operability of the MSSVs ensures that secondary system pressure is limited to 110% of its design pressure (1200 psia for Byron and Braidwood) during a turbine trip from 102% rated thermal power with no available path to the condenser (no steam dump capability). This represents the most severe anticipated operational transient. An increase on the positive side of the setpoint tolerance would potentially result in the MSSV lifting at a higher pressure, increasing the maximum pressure in the secondary system.

In its submittals of March 21, 1994, and March 24, 1994, CECO assessed the safety impact of plant operation with the higher setpoint tolerance. Specifically, the licensee examined the effect of the increased MSSV setpoint tolerance on the existing licensing basis events analyses as presented in the Updated Final Safety Analysis Report (UFSAR), and concluded that the analyses remain valid with the exception of the loss-of-external load/turbine trip event. The licensee re-analyzed this event assuming the relaxed tolerance, and determined that all applicable acceptance criteria would continue to be met and the UFSAR conclusions would remain valid. CECO concluded that the increased as-found setpoint tolerance has no significant impact on any system, operating mode, or accident analysis.

The licensee's findings are consistent with those of other similarly designed pressurized water reactor plants which have been granted relaxed setpoint tolerances for their MSSVs. These include Seabrook, V.C. Summer, and Fort Calhoun stations. Additionally, Section XI of the 1989 edition of the ASME Code requires that MSSVs be tested in accordance with ASME/ANSI OM-1987, Part 1, which permits the tested setpoint pressure to exceed the nominal value by up to 3% before a test failure is declared. The proposed increase in the tolerance is therefore also consistent with recent editions of the ASME Code.

On the basis that the setpoints are within  $\pm 3\%$ , which has been granted to other plants and the relatively short duration of the proposed change (approximately one month), the staff is satisfied that the MSSVs will continue to accomplish their function with a  $\pm 3\%$  tolerance, and therefore finds the proposed temporary revisions to the TS to be acceptable. It should be noted that any analyses submitted in support of future amendment requests for a permanent change of the setpoint tolerance are subject to further staff review.

### 3.0 EXIGENT CIRCUMSTANCES

On March 9, 1994, the Braidwood System Engineering Department was informed by the maintenance contractor for the MSSVs, Furmanite Company, that an improper value for the mean seat area was used by Trevitest, the valve vendor (a wholly-owned subsidiary of Furmanite) in calculating the lift setpoints. Additional communications between the Furmanite Company and the licensee indicated that the problem also existed at both Byron units. Subsequent calculations by the licensee of the as-left setpoints using a corrected mean seat area revealed that the tolerances on a total of 16 valves (out of 20) for Byron, Unit 1, 19 valves for Byron, Unit 2, and 17 valves each for both Braidwood units were outside of the  $\pm 1\%$  tolerance specified in TS 3.7.1.1, but were within  $\pm 3\%$ .

The NRC concluded there was minimal or no safety impact from the tolerance settings of the MSSVs and granted enforcement discretion from the Action requirements associated TS 3.7.1.1 for Byron, Units 1 and 2, and Braidwood, Unit 2, in order to avoid a forced shutdown of these units. The duration of enforcement discretion was for the period from March 10, 1994, until a TS amendment could be approved for both units of Byron and Braidwood. Subsequently, the licensee's March 21, 1994, submittal, requested that the license amendment be approved prior to April 17, 1994, to allow for the startup of Braidwood, Unit 1 from its refueling outage. Due to the provisions of TS 4.0.4., delayed issuance of the amendment would have prevented Braidwood, Unit 1 from restarting. The circumstances leading to this request for an exigent TS amendment could not have been avoided since the licensee was only recently made aware by the vendor of the need to reset the lift setpoint tolerances of the MSSVs. The situation was not created by a failure of the licensee to submit a timely application for a TS amendment.

### 4.0 FINAL NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION

The Commission's regulations in 10 CFR 50.92 state that the Commission may make a final determination that a license amendment involves no significant hazards considerations if operation of the facility in accordance with the amendment would not: (1) Involve a significant increase in the probability or consequences of an accident previously evaluated; or (2) create the possibility of a new or different kind of accident from any accident previously evaluated; or (3) involve a significant reduction in a margin of safety.

The proposed TS change (permitting continued activities at all four units until the MSSVs can be reset) does not significantly increase the probability of an accident previously evaluated. Analysis performed for MSSV setpoints of  $\pm 3\%$  showed that all of the applicable loss-of-coolant accident (LOCA) and non-LOCA design basis criteria remain valid both for the transients evaluated and the single event analyzed, Loss of External Load/Turbine Trip. The peak primary and secondary pressures remain below 110% of design at all times. The departure for nucleate boiling ratio (DNBR) and peak clad temperature (PCT) values remain within the specified limits of the licensing basis. The higher valve setpoint tolerance may increase the steam release from a ruptured steam generator above the updated final safety analysis report (UFSAR) by approximately 2%, but the steam generator tube rupture (SGTR) analysis indicates that the calculated break flow is still less than the value reported in the UFSAR. Therefore the slight increase in the steam release is offset by the decrease in the break flow such that the offsite radiation doses are less than those reported in the UFSAR.

The proposed TS change does not create the possibility of a new or different kind of accident previously evaluated since no new system configurations are introduced, and no equipment is being operated in a new or different manner than that previously analyzed. No new or different failure modes are being created.

The proposed TS change does not involve a significant reduction in a margin of safety. The MSSV setpoints will not adversely affect the operation of the reactor protection system, any of the protection setpoints, or any other device required for accident mitigation. The LOCA and non-LOCA conclusions in the UFSAR remain valid. The DNBR design basis, primary and secondary pressure limits, and dose release limits continue to be met. PCTs remain well below the limits specified in 10 CFR 50.46.

Therefore, in accordance with 10 CFR 50.92, the Commission has made a final determination that no significant hazards consideration is involved.

#### 5.0 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.

#### 6.0 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 (59 FR 14685). 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.

## 7.0 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.

In addition, the Commission has found that exigent circumstances exist, in that the licensee and the Commission must act quickly and that time does not permit the Commission to publish a Federal Register Notice allowing 30 days for prior public comment.

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