

November 23, 1988

Docket Nos.: 50-454 and 50-455

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

Dear Mr. Bliss:

✓ DISTRIBUTION

✓ Docket file
NRC & Local PDRs
LLuther
LOlshan
DHagan
EJordan
TBarnhart (8)
EButcher
RGoel

GHolahan ARM/LFMB
MVirgilio GPA/PA
DMuller
OGC
EJordan
BGrimes
WJones
ABuslik
ACRS (10)

SUBJECT: AMENDMENT NO. 24 TO THE BYRON TECHNICAL SPECIFICATIONS
(TAC NOS. 62184 AND 63267)

The Commission has issued the enclosed Amendment No. 24 to Facility Operating License No. NPF-37 and Amendment No. 24 to Facility Operating License No. NPF-66 for the Byron Station, Unit Nos. 1 and 2, respectively. The amendments consist of changes to the Technical Specifications in response to your application transmitted by letters dated August 15, 1986 and October 29, 1986.

These amendments add Technical Specifications to require the availability of one unit's Essential Service Water Pump while the other unit is operating.

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

Sincerely,

/s/

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

Enclosures:

1. Amendment No. 24 to NPF-37
2. Amendment No. 24 to NPF-66
3. Safety Evaluation

cc w/enclosures:
See next page

*See previous concurrence

PDIII-2	PDIII-2	OGC-Rockville	PDIII-2
*LOlshan:km	*LLuther		*DMuller
11/9/88	11/9/88	11/ /88	11/10/88

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PDR ADDCK 05000454
P PNU

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These amendments add Technical Specifications to require the availability of one unit's Essential Service Water Pump while the other unit is operating.

Now that Braidwood Station, Unit 2, has received its operating license, you should submit a proposal for a Technical Specification change similar to the one approved by the enclosures.

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,

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

Enclosures:

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3. Safety Evaluation

cc w/enclosures:
See next page

PDIII-2
LOlshan
10/9/88

PDIII-2
LLuther
10/09/88

OGC-Rockville
10/ /88

P.S. FOR
PDIII-2
DMuller
10/10/88



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555
November 23, 1988

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Sincerely,

A handwritten signature in cursive script, reading "Leonard N. Olshan", is written over the typed name.

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

Enclosures:

1. Amendment No. 24 to NPF-37
2. Amendment No. 24 to NPF-66
3. Safety Evaluation

cc w/enclosures:
See next page

Mr. Henry E. Bliss
Commonwealth Edison Company

Byron Station
Units 1 and 2

cc:

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Westinghouse Electric Corporation
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Attorney General
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Springfield, Illinois 62701

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Byron/Resident Inspectors Offices
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Byron, Illinois 61010

Chairman, Ogle County Board
Post Office Box 357
Oregon, Illinois 61061

EIS Review Coordinator
Environmental Protection Agency
Region V
230 S. Dearborn Street
Chicago, Illinois 60604

Commonwealth Edison Company
Byron Station Manager
4450 North German Church Road
Byron, Illinois 61010



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. 24
License No. NPF-37

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The applications for amendment by Commonwealth Edison Company (the licensee) dated August 15, 1986 and October 29, 1986, comply 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:

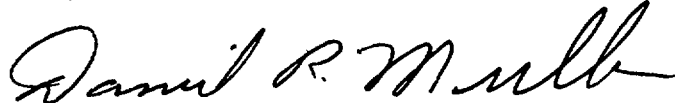
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P PNU

(2) Technical Specifications

The Technical Specifications contained in Appendix A as revised through Amendment No. 24 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

A handwritten signature in black ink, appearing to read "Daniel R. Muller", is written over the typed name.

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: November 23, 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. 24
License No. NPF-66

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The applications for amendment by Commonwealth Edison Company (the licensee) dated August 15, 1986 and October 29, 1986, comply 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. 24 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



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: November 23, 1988

ATTACHMENT TO LICENSE AMENDMENT NOS. 24 AND 24
FACILITY OPERATING LICENSE NOS. NPF-37 AND NPF-66
DOCKET NOS. 50-454 AND 50-455

Revise Appendix A as follows:

Remove Pages

Insert Pages

3/4 7-12a
3/4 7-12b

PLANT SYSTEMS

3/4.7.4 ESSENTIAL SERVICE WATER SYSTEM

LIMITING CONDITION FOR OPERATION

3.7.4.1 A Unit 2 (Unit 1) Essential Service Water pump shall be available to support Unit 1 (Unit 2) operation.

APPLICABILITY: Unit 2 (Unit 1) in MODES 5 and 6 with
Unit 1 (Unit 2) in MODES 1, 2, 3, and 4.

ACTION:

If neither Unit 2 (Unit 1) Essential Service Water pump is available, restore one pump to available status within 7 days or place Unit 1 (Unit 2) in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.7.4.1 A Unit 2 (Unit 1) Essential Service Water pump shall be demonstrated available by manually starting and crosstieing to the Unit 1 (Unit 2) system:

- a. At least once per day by verifying that:
 - 1) Bus 241 (141) is energized if the 2A (1A) Essential Service Water pump is the available pump or Bus 242 (142) is energized if the 2B (1B) Essential Service Water pump is the available pump, and
 - 2) The following valves are open or capable of being operated from the Control Room:
 - a) SX001A, SX005, SX016A, SX027A, SX033, SX034 and SX143A if the A pump is the available pump, or
 - b) SX001B, SX005, SX016B, SX027B, and SX143B if the B pump is the available pump.
- b. At least once per 31 days, by running the available pump for 15 minutes.

PLANT SYSTEMS

3/4.7.4 ESSENTIAL SERVICE WATER SYSTEM

LIMITING CONDITION FOR OPERATION

3.7.4.2 The Essential Service Water System Unit Crosstie shall be either open or capable of being opened from the Main Control Board as a flow-path between Units 1 and 2.

APPLICABILITY: Modes 1, 2, 3, and 4.

ACTION:

- a. With one or both of the crosstie valve(s) closed and not capable of being opened from the Control Room, within 7 days restore the valve(s) to available status or open the affected valve(s), and maintain the affected valve(s) open; 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

4.7.4.2 The Essential Service Water System Unit Crosstie shall be demonstrated available:

- a. At least once per 92 days by cycling crosstie valves 1SX005 and 2SX005 or verify valve is locked open with power removed.
- b. The provisions of Specification 4.0.4 are not applicable.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 24 TO FACILITY OPERATING LICENSE NO. NPF-37
AND AMENDMENT NO. 24 TO FACILITY OPERATING LICENSE NO. NPF-66

COMMONWEALTH EDISON COMPANY

BYRON STATION, UNITS 1 AND 2

DOCKET NOS. 50-454 AND 50-455

1.0 INTRODUCTION

In May 1984 Commonwealth Edison Company (the licensee) submitted its Limiting Conditions for Operation Relaxation Program (LCORP) for Byron Station. The program was submitted to justify extending the allowable outage times (AOTS) for certain equipment from 72 hours to 7 days. The BNL review flagged a plant vulnerability when Byron 1 operated its two-pump essential service water (ESW) system without crosstie capability for ESW backup from Unit 2.

2.0 BACKGROUND AND EVALUATION

The ESW system consists of two redundant and independent full capacity pump trains per unit. The trains are cross-connected within each unit. They are also cross-connected between the units through two redundant isolation valves powered from separate emergency (class IE) power supplies. The controls for the isolation valves are provided in the control room. The isolation valves are normally closed. The cross-over design is safety-related and meets GDC 5 requirements (refer to Byron SER-NUREG-0876).

The proposed addition to the Technical Specification submitted August 15, 1986 would have required the availability of one ESW pump and associated valves from the shutdown unit to support the operating unit and increase the availability of the essential service water system.

However, the staff noted several deficiencies in the Technical Specifications proposed in the August 15, 1986 letter. The first deficiency is that one ESW pump on Byron 1 and one ESW pump on Byron 2 could be in maintenance simultaneously. The second deficiency is the lack of Technical Specifications on the ESW system crosstie between the Byron 1 and Byron 2 when either or both units are in Modes 1, 2, 3 and 4.

By letter dated October 29, 1986, the licensee corrected both these deficiencies. The licensee made a commitment that it would not intentionally take one ESW pump from each unit out of service for maintenance at the same

time, and the licensee proposed Technical Specifications requiring the availability of the crosstie when either or both units are in modes 1, 2, 3, and 4. With these modifications, the staff finds the proposed Technical Specifications acceptable and concludes that the Byron ESW system satisfies GDC 44; GDC 44 requires that cooling water systems have suitable redundancy to transfer heat from structures, systems and components important to safety to a heat sink under both normal operating and accident conditions.

3.0 ENVIRONMENTAL CONSIDERATION

These amendments involve a change in the installation or use of the facilities components located within the restricted areas as defined in 10 CFR Part 20. The staff has determined that these 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 these amendments involve no significant hazards consideration and there has been no public comment on such finding. Accordingly, these amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR Sec 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 these amendments.

4.0 CONCLUSION

We have 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, and (2) such activities will be conducted in compliance with the Commission's regulations and the issuance of these amendments will not be inimical to the common defense and security or to the health and safety of the public.

5.0 PRINCIPAL CONTRIBUTORS:

A. Buslik
R. Goel
L. Olshan

Dated: November 23, 1988