

May 22, 2003

Mr. John L. Skolds, President  
Exelon Nuclear  
Exelon Generation Company, LLC  
4300 Winfield Road  
Warrenville, IL 60555

SUBJECT: BYRON STATION, UNITS 1 AND 2, AND BRAIDWOOD STATIONS, UNITS 1  
AND 2 - ISSUANCE OF AMENDMENTS (TAC NOS. MB7154, MB7155,  
MB7152, AND MB7153)

Dear Mr. Skolds:

The U.S. Nuclear Regulatory Commission has issued the enclosed Amendment No. 132 to Facility Operating License No. NPF-37 and Amendment No. 132 to Facility Operating License No. NPF-66 for the Byron Station, Unit Nos. 1 and 2, respectively, and Amendment No. 127 to Facility Operating License No. NPF-72 and Amendment No. 127 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 December 12, 2002.

The amendments would add a new Surveillance Requirement to Technical Specification Section 3.7.5, "Auxiliary Feedwater (AF) System," which requires operation of the diesel-driven AF pump on a monthly frequency (i.e., once every 31 days) for greater than or equal to 15 minutes.

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,

/RA/

Mahesh Chawla, Project Manager, Section 2  
Project Directorate III  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

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

Enclosures: 1. Amendment No. 132 to NPF-37  
2. Amendment No. 132 to NPF-66  
3. Amendment No. 127 to NPF-72  
4. Amendment No. 127 to NPF-77  
5. Safety Evaluation

cc w/encls: See next page

Byron/Braidwood Stations

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May 22, 2003

Mr. John L. Skolds, President  
Exelon Nuclear  
Exelon Generation Company, LLC  
4300 Winfield Road  
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SUBJECT: BYRON STATION, UNITS 1 AND 2, AND BRAIDWOOD STATIONS, UNITS 1  
AND 2 - ISSUANCE OF AMENDMENTS (TAC NOS. MB7154, MB7155, MB7152,  
AND MB7153)

Dear Mr. Skolds:

The U.S. Nuclear Regulatory Commission has issued the enclosed Amendment No. 132 to Facility Operating License No. NPF-37 and Amendment No. 132 to Facility Operating License No. NPF-66 for the Byron Station, Unit Nos. 1 and 2, respectively, and Amendment No. 127 to Facility Operating License No. NPF-72 and Amendment No. 127 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 December 12, 2002.

The amendments would add a new Surveillance Requirement to Technical Specification Section 3.7.5, "Auxiliary Feedwater (AF) System," which requires operation of the diesel-driven AF pump on a monthly frequency (i.e., once every 31 days) for greater than or equal to 15 minutes.

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,

/RA/

Mahesh Chawla, Project Manager, Section 2  
Project Directorate III  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

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

Enclosures: 1. Amendment No. 132 to NPF-37  
2. Amendment No. 132 to NPF-66  
3. Amendment No. 127 to NPF-72  
4. Amendment No. 127 to NPF-77  
5. Safety Evaluation

cc w/encls: See next page

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EXELON GENERATION COMPANY, LLC

DOCKET NO. STN 50-454

BYRON STATION, UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 132  
License No. NPF-37

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Exelon Generation Company, LLC (the licensee) dated December 12, 2002, 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. 132 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 of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

*/RA/*

Anthony J. Mendiola, Chief, Section 2  
Project Directorate III  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: May 22, 2003

EXELON GENERATION COMPANY, LLC

DOCKET NO. STN 50-455

BYRON STATION, UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 132  
License No. NPF-66

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Exelon Generation Company, LLC (the licensee) dated December 12, 2002, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules and regulations set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
  - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
  - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
  - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. NPF-66 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A, (NUREG-1113) as revised through Amendment No. 132 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. 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 of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

*/RA/*

Anthony J. Mendiola, Chief, Section 2  
Project Directorate III  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: May 22, 2003



ATTACHMENT TO LICENSE AMENDMENT NOS. 132 AND 132

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

DOCKET NOS. STN 50-454 AND STN 50-455

Replace the following pages of the Appendix "A" Technical Specifications with the attached pages. The revised pages are identified by amendment number and contain marginal lines indicating the area of change.

Remove Pages

3.7.5-2  
3.7.5-3

Insert Pages

3.7.5-2  
3.7.5-3

EXELON GENERATION COMPANY, LLC

DOCKET NO. STN 50-456

BRAIDWOOD STATION, UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 127  
License No. NPF-72

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Exelon Generation Company, LLC (the licensee) dated December 12, 2002, 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. 127 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 of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

*/RA/*

Anthony J. Mendiola, Chief, Section 2  
Project Directorate III  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: May 22, 2003

EXELON GENERATION COMPANY, LLC

DOCKET NO. STN 50-457

BRAIDWOOD STATION, UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 127  
License No. NPF-77

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Exelon Generation Company, LLC (the licensee) dated December 12, 2002, 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. 127 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 of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

*/RA/*

Anthony J. Mendiola, Chief, Section 2  
Project Directorate III  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: May 22, 2003

ATTACHMENT TO LICENSE AMENDMENT NOS. 127 AND 127

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 marginal lines indicating the area of change.

Remove Pages

3.7.5-2  
3.7.5-3

Insert Pages

3.7.5-2  
3.7.5-3

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 132 TO FACILITY OPERATING LICENSE NO. NPF-37,  
AMENDMENT NO. 132 TO FACILITY OPERATING LICENSE NO. NPF-66,  
AMENDMENT NO. 127 TO FACILITY OPERATING LICENSE NO. NPF-72,  
AND AMENDMENT NO. 127 TO FACILITY OPERATING LICENSE NO. NPF-77  
EXELON GENERATION COMPANY, LLC  
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 December 12, 2002, Exelon Generation Company, LLC (the licensee) requested changes to its Technical Specifications (TSs) for Braidwood Station, Units 1 and 2, and Byron Station, Units 1 and 2, (Ref. 1).

The proposed changes would revise TS Section 3.7.5, "Auxiliary Feedwater (AF) System," by adding a surveillance requirement to operate the diesel-driven AF pump for at least 15 minutes on a monthly frequency (i.e., once every 31 days). This change is requested to maintain a high level of assurance that the diesel engine will automatically start when called upon to perform its design basis function.

## 2.0 REGULATORY EVALUATION

The Braidwood and Byron TSs currently require that both the diesel-driven and the motor-driven auxiliary feedwater pumps be operated once per quarter (i.e., once every 92 days) in accordance with its American Society of Mechanical Engineers (ASME) Code, Section XI inservice testing program. The licensee is required by 10 CFR 50.55a (Ref. 2) to perform inservice testing of its AF pumps in accordance with the requirements of the ASME Code, Section XI. The licensee's proposed TS change does not change any Code requirement nor Code acceptance criteria.

The regulations in 10 CFR 50.36(c)(3) (Ref. 3) state that surveillance requirements are requirements relating to test, calibration, or inspection to assure that the necessary quality of systems and components is maintained, that facility operation will be within safety limits, and that the limiting conditions of operation will be met. Adding a surveillance requirement to operate the diesel-driven AF pump for at least 15 minutes on a monthly frequency (i.e., once

every 31 days) will assure that the diesel-driven AF pump will automatically start when called upon to perform its design basis function.

### 3.0 TECHNICAL EVALUATION

The staff has reviewed the licensee's technical and regulatory analysis in support of its license amendment as described in Sections 5 and 6 of Attachment 2 to the licensee's submittal (Ref. 1). The licensee has proposed to revise TS Section 3.7.5, "Auxiliary Feedwater System," by adding a surveillance requirement to operate the diesel-driven AF pump for at least 15 minutes on a monthly frequency (i.e., once every 31 days). Currently, this section requires that both the diesel-driven and the motor-driven AF pumps be operated once per quarter (i.e., once every 92 days) in accordance with the ASME Code, Section XI inservice testing program.

The original TS surveillance frequency for the auxiliary feedwater pumps was monthly. However, in 1996, the frequency was changed to quarterly in response to Nuclear Regulatory Commission (NRC) Generic Letter 93-05, "Line-item TS Improvements to Reduce Surveillance Requirements for Testing During Power Operation," (Ref. 4). Shortly after receiving NRC approval to change the test frequency, the Byron Station experienced operational problems with the diesel engine of the diesel-driven AF pump and elected to resume monthly testing. The Braidwood station did not implement quarterly testing of the diesel-driven AF pump and maintained a monthly testing frequency.

During the surveillance test, the pumps are tested through a minimum-flow recirculation line. The licensee has previously performed an evaluation and determined that the measured minimum flow rates of the AF pumps exceed the calculated theoretical minimum flow rate requirement by a sufficient margin so as not to present an operational concern during testing.

This proposed change will reduce plant risk by maintaining a high level of assurance that the diesel engine will automatically start when called upon to perform its design basis function. This change is consistent with the original TS monthly testing frequency of the diesel-driven AF pumps and is consistent with the actual testing frequency performed by the licensee. The proposed TS change does not change any Code requirement or Code acceptance criteria.

### 3.1 SUMMARY

The proposed change to add a surveillance requirement to operate the diesel-driven AF pump for at least 15 minutes on a monthly frequency (i.e., once every 31 days) will reduce plant risk by maintaining a high level of assurance that the diesel-driven AF pump will automatically start when called upon to perform its design basis function. This change is consistent with the original TS monthly testing frequency of the diesel-driven AF pumps and aligns the TS required testing frequency with the actual testing frequency maintained by the licensee, and is thus, acceptable.



#### 4.0 STATE CONSULTATION

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

#### 5.0 ENVIRONMENTAL CONSIDERATION

The amendments (Refs. 5-8) change a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 or change the surveillance requirement. 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 (68 FR 7817). 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.

#### 7.0 REFERENCES

1. Letter from Keith R. Jury (Exelon Generation Company, LLC) to NRC, "Request for a License Amendment to add a Technical Specification Surveillance Requirement for the Diesel-Driven Auxiliary Feedwater Pump," December 12, 2002.
2. 10 CFR 50.55a(f).
3. 10 CFR 50.36(c)(3.)
4. NRC Generic Letter, 93-05, "Line-item Technical Specification Improvements to Reduce Surveillance Requirements for Testing During Power Operation."
5. Amendment No. 82 to Facility Operating License No. NPF-37.
6. Amendment No. 82 to Facility Operating License No. NPF-66.
7. Amendment No. 74 to Facility Operating License No. NPF-72.
8. Amendment No. 74 to Facility Operating License No. NPF-77.

Principal Contributor: W. Poertner, NRR/DE/EMEB

Date: May 22, 2003