

May 6, 2003

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

SUBJECT: QUAD CITIES NUCLEAR POWER STATION, UNITS 1 AND 2 - ISSUANCE OF
AMENDMENTS RE: SURVEILLANCE REQUIREMENT FOR THE SCRAM
DISCHARGE VOLUME WATER LEVEL - HIGH DIFFERENTIAL PRESSURE
SWITCHES (TAC NOS. MB7859 AND MB7860)

Dear Mr. Skolds:

The U.S. Nuclear Regulatory Commission (Commission) has issued the enclosed Amendment No. 214 to Facility Operating License No. DPR-29 and Amendment No. 208 to Facility Operating License No. DPR-30 for the Quad Cities Nuclear Power Station, Units 1 and 2, respectively. The amendments consist of changes to the Technical Specifications in response to your application dated February 27, 2003, as supplemented April 7, 2003.

The amendments add a surveillance requirement to perform a quarterly trip unit calibration of the reactor protection system scram discharge volume water level - high differential pressure switches.

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

Sincerely,

/RA/

Carl F. Lyon, Project Manager, Section 2
Project Directorate III
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket Nos. 50-254 and 50-265

Enclosures: 1. Amendment No. 214 to DPR-29
2. Amendment No. 208 to DPR-30
3. Safety Evaluation

cc w/encls: See next page

Quad Cities Nuclear Power Station Units 1 and 2

cc:

Site Vice President - Quad Cities Nuclear Power Station
Exelon Generation Company, LLC
22710 206th Avenue N.
Cordova, IL 61242-9740

Quad Cities Nuclear Power Station Plant Manager
Exelon Generation Company, LLC
22710 206th Avenue N.
Cordova, IL 61242-9740

Regulatory Assurance Manager - Quad Cities
Exelon Generation Company, LLC
22710 206th Avenue N.
Cordova, IL 61242-9740

Quad Cities Resident Inspectors Office
U.S. Nuclear Regulatory Commission
22712 206th Avenue N.
Cordova, IL 61242

David C. Tubbs
MidAmerican Energy Company
One River Center Place
106 E. Second, P.O. Box 4350
Davenport, IA 52808-4350

Vice President - Law and Regulatory Affairs
MidAmerican Energy Company
One River Center Place
106 E. Second Street
P.O. Box 4350
Davenport, IA 52808

Chairman
Rock Island County Board of Supervisors
1504 3rd Avenue
Rock Island County Office Bldg.
Rock Island, IL 61201

Regional Administrator
U.S. NRC, Region III
801 Warrenville Road
Lisle, IL 60532-4351

Illinois Department of Nuclear Safety
Office of Nuclear Facility Safety
1035 Outer Park Drive
Springfield, IL 62704

Document Control Desk-Licensing
Exelon Generation Company, LLC
4300 Winfield Road
Warrenville, IL 60555

Senior Vice President - Nuclear Services
Exelon Generation Company, LLC
4300 Winfield Road
Warrenville, IL 60555

Vice President
Mid-West Operations Support
Exelon Generation Company, LLC
4300 Winfield Road
Warrenville, IL 60555

Senior Vice President
Mid-West Regional Operating Group
Exelon Generation Company, LLC
4300 Winfield Road
Warrenville, IL 60555

Vice President - Licensing and Regulatory Affairs
Exelon Generation Company, LLC
4300 Winfield Road
Warrenville, IL 60555

Director - Licensing
Mid-West Regional Operating Group
Exelon Generation Company, LLC
4300 Winfield Road
Warrenville, IL 60555

Senior Counsel, Nuclear
Mid-West Regional Operating Group
Exelon Generation Company, LLC
4300 Winfield Road
Warrenville, IL 60555

Manager Licensing - Dresden and Quad Cities
Exelon Generation Company, LLC
4300 Winfield Road
Warrenville, IL 60555

May 6, 2003

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

SUBJECT: QUAD CITIES NUCLEAR POWER STATION, UNITS 1 AND 2 - ISSUANCE OF AMENDMENTS RE: SURVEILLANCE REQUIREMENT FOR THE SCRAM DISCHARGE VOLUME WATER LEVEL - HIGH DIFFERENTIAL PRESSURE SWITCHES (TAC NOS. MB7859 AND MB7860)

Dear Mr. Skolds:

The U.S. Nuclear Regulatory Commission (Commission) has issued the enclosed Amendment No. 214 to Facility Operating License No. DPR-29 and Amendment No. 208 to Facility Operating License No. DPR-30 for the Quad Cities Nuclear Power Station, Units 1 and 2, respectively. The amendments consist of changes to the Technical Specifications in response to your application dated February 27, 2003, as supplemented April 7, 2003.

The amendments add a surveillance requirement to perform a quarterly trip unit calibration of the reactor protection system scram discharge volume water level - high differential pressure switches.

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

Sincerely,

/RA/

Carl F. Lyon, Project Manager, Section 2
Project Directorate III
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket Nos. 50-254 and 50-265

- Enclosures: 1. Amendment No. 214 to DPR-29
- 2. Amendment No. 208 to DPR-30
- 3. Safety Evaluation

cc w/encls: See next page

DISTRIBUTION:

PUBLIC	RidsNrrLAPCoates	RidsRgn3MailCenter (GGrant)
PD3-2 Reading	RidsOgcRp	MRing, RIII
RidsNrrDlpmLpdiii (WRuland)	RidsAcrsAcnwMailCenter	EMarinos (NRR/DE/EEIB)
RidsNrrDlpmLpdiii-2 (AMendiola)	GHill (4) T-5C3	WBeckner (NRR/DRIP/RORP)
RidsNrrPMFLyon	RidsNrrDrip (RDennig)	

Package Number:

TS Number:

ADAMS Accession Number: ML030990604

OFFICE	PDIII-2/PM	PDIII-2/LA	EEIB/SC	RORP/SC	OGC	PDIII-2/SC
NAME	FLyon	PCoates	EMarinos	KKavanagh for RDennig	RHoefling	AMendiola
DATE	04/11/03	04/10/03	04/21/03	04/25/03	05/01/03	05/06/03

OFFICIAL RECORD COPY

EXELON GENERATION COMPANY, LLC

AND

MIDAMERICAN ENERGY COMPANY

DOCKET NO. 50-254

QUAD CITIES NUCLEAR POWER STATION, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 214
License No. DPR-29

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Exelon Generation Company, LLC (the licensee) dated February 27, 2003, as supplemented April 7, 2003, 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 3.B. of Facility Operating License No. DPR-29 is hereby amended to read as follows:

B. Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 214, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of its issuance and shall be implemented within 60 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 6, 2003

EXELON GENERATION COMPANY, LLC

AND

MIDAMERICAN ENERGY COMPANY

DOCKET NO. 50-265

QUAD CITIES NUCLEAR POWER STATION, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 208
License No. DPR-30

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Exelon Generation Company, LLC (the licensee) dated February 27, 2003, as supplemented April 7, 2003, 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 3.B. of Facility Operating License No. DPR-30 is hereby amended to read as follows:

B. Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 208, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of its issuance and shall be implemented within 60 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 6, 2003

ATTACHMENT TO LICENSE AMENDMENT NOS. 214 AND 208

FACILITY OPERATING LICENSE NOS. DPR-29 AND DPR-30

DOCKET NOS. 50-254 AND 50-265

Replace the following page of the Appendix "A" Technical Specifications with the attached page. The revised page is identified by number and contains marginal lines indicating the area of change.

Remove Page

3.3.1.1-9

Insert Page

3.3.1.1-9

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 214 TO FACILITY OPERATING LICENSE NO. DPR-29
AND AMENDMENT NO. 208 TO FACILITY OPERATING LICENSE NO. DPR-30
EXELON GENERATION COMPANY, LLC
AND
MIDAMERICAN ENERGY COMPANY
QUAD CITIES NUCLEAR POWER STATION, UNITS 1 AND 2
DOCKET NOS. 50-254 AND 50-265

1.0 INTRODUCTION

By application dated February 27, 2003, as supplemented April 7, 2003, Exelon Generation Company, LLC (the licensee) requested changes to the Technical Specifications (TSs) for the Quad Cities Nuclear Power Station, Units 1 and 2 (QCNPS). The supplement dated April 7, 2003, provided additional information that clarified the application, did not expand the scope of the application as originally noticed, and did not change the staff's original proposed no significant hazards consideration determination as published in the *Federal Register* on April 1, 2003 (68 FR 15760).

The proposed changes would revise the TSs by adding a surveillance requirement to perform a quarterly trip unit calibration of the reactor protection system scram discharge volume water level - high differential pressure switches. Specifically the proposed changes would revise:

1.1 TS Table 3.3.1.1-1

The licensee proposes adding Surveillance Requirement (SR) 3.3.1.1.11 to TS Table 3.3.1.1-1, function 7.b. SR 3.3.1.1.11 requires calibration of the trip units every 92 days. The licensee also proposes deleting the words, "Thermal Switch (for Unit 1 only through cycle 17)," from function 7.a. Thermal switches are no longer used in the scram discharge volume water level monitoring instrumentation.

2.0 REGULATORY EVALUATION

The reactor protection system is described in section 7.2 of the Quad Cities Updated Final Safety Analysis Report and includes the scram discharge volume (SDV) high water level scram trip. The purpose of the SDV high water level scram trip is to assure that adequate volume remains to accommodate the water discharged from the withdrawn control rod drives in the event that a reactor scram occurs. SDV high water level inputs to the reactor protection

system are from two float-type and two differential pressure-type level sensors on each of the SDVs.

The regulation at 10 CFR 50.36(c)(3) defines surveillance requirements as “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 for operation will be met.” TS Section 3.3.1.1 provides the operability requirements applicable to the reactor protection system instrumentation. The SDV water level - high scram is required to be operable in Modes 1, 2, and 5 with any control rod withdrawn from a core cell containing one or more fuel assemblies. As part of the operability requirements, SR 3.3.1.1.11 specifies performance of trip unit calibrations at a requisite interval on certain instrumentation listed in TS Table 3.3.1.1-1, including the SDV water level - high instruments. Performance of SR 3.3.1.1.11 ensures a high degree of safety system reliability.

The staff finds that the licensee identified the applicable regulatory requirements in Attachment 2, sections 4.0 and 6.0, of its submittal. The regulatory requirements for which the staff based its acceptance are 10 CFR 50.36(c)(3) and 10 CFR 50.55a(h)(2), which encompasses the detailed requirements discussed by the licensee in its submittal.

3.0 TECHNICAL EVALUATION

The staff has reviewed the licensee’s technical analyses in support of its proposed license amendment, which are described in Attachment 2 of the licensee’s submittal. Based on review of the licensee’s submittal, the staff concludes that the proposed changes are acceptable.

3.1 TS Table 3.3.1.1-1, Function 7.a

The licensee proposes to delete the words, “Thermal Switch (for Unit 1 only through cycle 17),” from function 7.a, so that only the words, “Float Switch” remain. Since Unit 1 is in cycle 18, and the instrumentation for both units has been upgraded from thermal switches to float switches, the reference to thermal switches is no longer needed. The change is administrative and reflects the actual SDV level monitoring instrumentation installed at the facilities. Therefore, the staff finds it acceptable.

3.2 TS Table 3.3.1.1-1, Function 7.b

The licensee proposes to add SR 3.3.1.1.11 to each SR listing (i.e., listing for Modes 1, 2, and the specified condition in Mode 5). SR 3.3.1.1.11 requires calibration of the trip units every 92 days. The SDV water level instrumentation consists of a differential pressure type level transmitter with a non-indicating electronic trip unit. The use of level transmitters and trip units allow utilization of a 24-month surveillance frequency for the level channel calibration, provided that the associated trip units are calibrated every 92 days. SR 3.3.1.1.16 is the 24-month channel calibration and is already specified in TS Table 3.3.1.1-1 for the SDV water level instrumentation. Therefore, the 92-day trip unit calibration should also be specified in TS Table 3.3.1.1-1 for the SDV water level instrumentation. The licensee is performing the 92-day trip unit calibration in accordance with NRC Administrative Letter 98-10, “Dispositioning of

Technical Specifications That Are Insufficient to Assure Plant Safety.” The proposed change would add the required surveillance to the TSs.

The licensee has based the 92-day calibration frequency on the NRC-approved General Electric Licensing Topical Report NEDC-30851P-A, “Technical Specification Improvement Analyses for BWR Reactor Protection System,” dated March 1988. The licensee verified that the generic analysis of NEDC-30851P-A applied to QCNPS in Attachment E of their December 27, 1999, application to extend the surveillance test interval for selected instruments from monthly to quarterly. The NRC approved the licensee’s December 27, 1999, application in Amendments 198/194, dated March 28, 2001. In addition, the licensee stated that the associated TS allowable value was determined in accordance with setpoint methodology described in licensee nuclear standard NES-EIC-20.04, “Analysis of Instrument Channel Setpoint Error and Instrument Loop Accuracy.” NES-EIC-20.04 was reviewed and accepted by the NRC in approving Amendments 199/195, dated March 30, 2001.

Since the addition of SR 3.3.1.1.11 to function 7.b makes the TSs more comprehensive and is consistent with NRC-approved methodology, the staff concludes that the proposed change is 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 change an inspection or 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 15760). 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: F. Lyon

Date: May 6, 2003