

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

May 11, 2016

Mr. Bryan C. Hanson Senior Vice President Exelon Generation Company, LLC President and Chief Nuclear Officer (CNO) Exelon Nuclear 4300 Winfield Road Warrenville, IL 60555

SUBJECT: CLINTON POWER STATION, UNIT NO. 1; DRESDEN NUCLEAR POWER STATION, UNITS 2 AND 3; AND QUAD CITIES NUCLEAR POWER STATION, UNITS 1 AND 2 - ISSUANCE OF AMENDMENTS TO REVISE THE REACTOR STEAM DOME PRESSURE IN TECHNICAL SPECIFICATION 2.1.1, "REACTOR CORE SLs" (CAC NOS. MF6640–MF6644)

Dear Mr. Hanson:

The U.S. Nuclear Regulatory Commission (NRC or Commission) has issued the following enclosed amendments in response to the Exelon Generation Company, LLC application dated August 18, 2015, as supplemented by letter dated April 14, 2016 (Agencywide Documents Access and Management System (ADAMS) Accession Nos. ML15231A097 and ML16105A421, respectively):

- 1. Amendment No. 209 to Facility Operating License No. NPF-62 for the Clinton Power Station, Unit No. 1,
- Amendment No. 250 to Renewed Facility Operating License No. DPR-19 and Amendment No. 243 to Renewed Facility Operating License No. DPR-25 for Dresden Nuclear Power Station, Units 2 and 3, respectively, and
- 3. Amendment No. 262 to Renewed Facility Operating License No. DPR-29 and Amendment No. 257 to Renewed Facility Operating License No. DPR-30 for the Quad Cities Nuclear Power Station, Units 1 and 2, respectively.

The amendments revise the reactor steam dome pressure specified in Technical Specification 2.1.1, "Reactor Core SLs [Safety Limits]."

B. Hanson

Commission's biweekly Federal Register notice.

A copy of our safety evaluation is also enclosed. The Notice of Issuance will be included in the

Sincerely,

BLIM

Blake Purnell, Project Manager Plant Licensing Branch III-2 **Division of Operating Reactor Licensing** Office of Nuclear Reactor Regulation

Docket Nos. 50-461, 50-237, 50-249, 50-254, and 50-265

Enclosures:

- 1. Amendment No. 209 to NPF-62
- 2. Amendment No. 250 to DPR-19
- 3. Amendment No. 243 to DPR-25
- 4. Amendment No. 262 to DPR-29
- 5. Amendment No. 257 to DPR-30
- 6. Safety Evaluation

cc w/encls: Distribution via Listserv



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

EXELON GENERATION COMPANY, LLC

DOCKET NO. 50-461

CLINTON POWER STATION, UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 209 License No. NPF-62

- 1. The U.S. Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Exelon Generation Company, LLC (the licensee) dated August 18, 2015, as supplemented by letter dated April 14, 2016, 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-62 is hereby amended to read as follows:

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, as revised through Amendment No. 209, are hereby incorporated into this license. Exelon Generation Company 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 60 days of the date of issuance.

FOR THE NUCLEAR/REGULATORY COMMISSION

היון אינידי

G. Edward Miller, Acting Branch Chief Plant Licensing Branch III-2 Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical Specifications and Facility Operating License

Date of Issuance: May 11, 2016

ATTACHMENT TO LICENSE AMENDMENT NO. 209

FACILITY OPERATING LICENSE NO. NPF-62

DOCKET NO. 50-461

Replace the following pages of the Facility Operating License and Appendix A, Technical Specifications (TSs), with the enclosed pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

Remove

Insert

License NPF-62 Page 3 License NPF-62 Page 3

<u>TSs</u> 2.0-1 <u>TSs</u> 2.0-1

- (4) Exelon Generation Company, pursuant to the Act and to 10 CFR Parts 30, 40, and 70, to receive, possess, and use at any time any byproduct, source and special nuclear material as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;
- (5) Exelon Generation Company, pursuant to the Act and 10 CFR Parts 30, 40, and 70, to receive, possess, and use in amounts as required any byproduct, source or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components;
- (6) Exelon Generation Company, pursuant to the Act and 10 CFR Parts 30, 40, and 70, to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility. Mechanical disassembly of the GE14i isotope test assemblies containing Cobalt-60 is not considered separation; and
- (7) Exelon Generation Company, pursuant to the Act and 10 CFR Parts 30, to intentionally produce, possess, receive, transfer, and use Cobalt-60.
- C. This license shall be deemed to contain and is subject to the conditions specified in the Commission's regulations set forth in 10 CFR Chapter I and is subject to all applicable provisions of the Act and to the rules, regulations and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:
 - (1) Maximum Power Level

Exelon Generation Company is authorized to operate the facility at reactor core power levels not in excess of 3473 megawatts thermal (100 percent rated power) in accordance with the conditions specified herein.

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, as revised through Amendment No. 209, are hereby incorporated into this license. Exelon Generation Company shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

Amendment No. 209

2.1 SLs

- 2.1.1 Reactor Core SLs
 - 2.1.1.1 With the reactor steam dome pressure < 700 psia or core flow < 10% rated core flow:

THERMAL POWER shall be \leq 21.6% RTP.

2.1.1.2 With the reactor steam dome pressure \geq 700 psia and core flow \geq 10% rated core flow:

MCPR shall be \geq 1.09 for two recirculation loop operation or \geq 1.12 for single recirculation loop operation.

2.1.1.3 Reactor vessel water level shall be greater than the top of active irradiated fuel.

2.1.2 Reactor Coolant System Pressure SL

Reactor steam dome pressure shall be \leq 1325 psig.

2.2 SL Violations

With any SL violation, the following actions shall be completed:

- 2.2.1 Within 1 hour, notify the NRC Operations Center, in accordance with 10 CFR 50.72.
- 2.2.2 Within 2 hours:
 - 2.2.2.1 Restore compliance with all SLs; and
 - 2.2.2.2 Insert all insertable control rods.
- 2.2.3 Within 24 hours, notify the plant manager and the corporate executive responsible for overall plant nuclear safety.

(continued)



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

EXELON GENERATION COMPANY, LLC

DOCKET NO. 50-237

DRESDEN NUCLEAR POWER STATION, UNIT 2

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 250 Renewed License No. DPR-19

- 1. The U.S. Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Exelon Generation Company, LLC (the licensee) dated August 18, 2015, as supplemented by letter dated April 14, 2016, 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 Renewed Facility Operating License No. DPR-19 is hereby amended to read as follows:

(2) <u>Technical Specifications</u>

The Technical Specifications contained in Appendix A, as revised through Amendment No. 250, are hereby incorporated into this renewed operating license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of its date of issuance and shall be implemented within 60 days.

FOR THE NUCLEAR REGULATORY COMMISSION

SDOW Mun

G. Edward Miller, Acting Branch Chief Plant Licensing Branch III-2 Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

Attachment:

Changes to the Technical Specifications and Renewed Facility Operating License

Date of Issuance: May 11, 2016



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

EXELON GENERATION COMPANY, LLC

DOCKET NO. 50-249

DRESDEN NUCLEAR POWER STATION, UNIT 3

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 243 Renewed License No. DPR-25

- 1. The U.S. Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Exelon Generation Company, LLC (the licensee) dated August 18, 2015, as supplemented by letter dated April 14, 2016, 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 Renewed Facility Operating License No. DPR-25 is hereby amended to read as follows:
 - B. <u>Technical Specifications</u>

The Technical Specifications contained in Appendix A, as revised through Amendment No. 243, are hereby incorporated into this renewed operating license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of its date of issuance and shall be implemented within 60 days.

FOR THE NUCLEAR REGULATORY COMMISSION

20015 Aug

G. Edward Miller, Acting Branch Chief Plant Licensing Branch III-2 Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

Attachment:

Changes to the Technical Specifications and Renewed Facility Operating License

Date of Issuance May 11, 2016

ATTACHMENT TO LICENSE AMENDMENT NOS. 250 AND 243

RENEWED FACILITY OPERATING LICENSE NOS. DPR-19 AND DPR-25

DOCKET NOS. 50-237 AND 50-249

Replace the following page of the Renewed Facility Operating Licenses and Appendix A, Technical Specifications (TSs), with the attached pages. The revised pages are identified by amendment number and contains marginal lines indicating the areas of change.

_

Remove	Insert	
<u>License DPR-19</u>	<u>License DPR-19</u>	
Page 3	Page 3	
<u>License DPR-25</u>	<u>License DPR-25</u>	
Page 4	Page 4	
<u>TSs</u>	<u>TSs</u>	
2.0-1	2.0-1	

- (2) Exelon Generation Company, LLC, pursuant to the Act and 10 CFR Part 70, to receive, possess and use at any time special nuclear materials as reactor fuel, in accordance with the limitations for storage and amounts required for reactor operation, as described in the Updated Final Safety Analysis Report, as supplemented and amended;
- (3) Exelon Generation Company, LLC, pursuant to the Act and 10 CFR Parts 30, 40 and 70, to receive, possess and use at any time any byproduct, source and special nuclear material as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;
- (4) Exelon Generation Company, LLC, pursuant to the Act and 10 CFR Parts 30, 40 and 70, to receive, possess and use in amounts as required any byproduct, source or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components; and
- (5) Exelon Generation Company, LLC, pursuant to the Act and 10 CFR Parts 30, 40 and 70, to possess, but not separate, such byproduct special nuclear materials as may be produced by the operation of the facility.
- C. This renewed operating license shall be deemed to contain and is subject to the conditions specified in the Commission's regulations set forth in 10 CFR Chapter I; is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:
 - (1) Maximum Power Level

The licensee is authorized to operate the facility at steady state reactor core power levels not in excess of 2957 megawatts thermal (100 percent rated power) in accordance with the conditions specified herein.

(2) <u>Technical Specifications</u>

The Technical Specifications contained in Appendix A, as revised through Amendment No. 250, are hereby incorporated into this renewed operating license. The licensee shall operate the facility in accordance with the Technical Specifications.

(3) Operation in the coastdown mode is permitted to 40% power.

Renewed License No. DPR-19 Amendment No. 250 f. Surveillance Requirement 4.9.A.10 - Diesel Storage Tank Cleaning (Unit 3 and Unit 2/3 only)

Each of the above Surveillance Requirements shall be successfully demonstrated prior to entering into MODE 2 on the first plant startup following the fourteenth refueling outage (D3R14).

3. This renewed operating license shall be deemed to contain and is subject to the conditions specified in the following Commission regulations: 10 CFR Part 20, Section 30.34 of 10 CFR Part 30, Section 40.41 of 10 CFR Part 40, Sections 50.54 and 50.59 of 10 CFR Part 50, and Section 70.32 of 10 CFR Part 70; is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:

A. <u>Maximum Power Level</u>

The licensee is authorized to operate the facility at steady state power levels not in excess of 2957 megawatts (thermal), except that the licensee shall not operate the facility at power levels in excess of five (5) megawatts (thermal), until satisfactory completion of modifications and final testing of the station output transformer, the auto-depressurization interlock, and the feedwater system, as described in the licensee's telegrams; dated February 26, 1971, have been verified in writing by the Commission.

B. <u>Technical Specifications</u>

The Technical Specifications contained in Appendix A, as revised through Amendment No. 243, are hereby incorporated into this renewed operating license. The licensee shall operate the facility in accordance with the Technical Specifications.

C. Reports

The licensee shall make certain reports in accordance with the requirements of the Technical Specifications.

D. <u>Records</u>

The licensee shall keep facility operating records in accordance with the requirements of the Technical Specifications.

E. <u>Restrictions</u>

Operation in the coastdown mode is permitted to 40% power.

Renewed License No. DPR-25 Amendment No. 243

2.1 SLs

- 2.1.1 <u>Reactor Core SLs</u>
 - 2.1.1.1 With the reactor steam dome pressure < 685 psig or core flow < 10% rated core flow:

THERMAL POWER shall be $\leq 25\%$ RTP.

2.1.1.2 With the reactor steam dome pressure ≥ 685 psig and core | flow ≥ 10% rated core flow:

For two recirculation loop operation, MCPR shall be \geq 1.12, or for single recirculation loop operation, MCPR shall be \geq 1.14.

- 2.1.1.3 Reactor vessel water level shall be greater than the top of active irradiated fuel.
- 2.1.2 Reactor Coolant System Pressure SL

Reactor steam dome pressure shall be \leq 1345 psig.

2.2 SL Violations

With any SL violation, the following actions shall be completed within 2 hours:

2.2.1 Restore compliance with all SLs; and

2.2.2 Insert all insertable control rods.



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

EXELON GENERATION COMPANY, LLC

<u>AND</u>

MIDAMERICAN ENERGY COMPANY

DOCKET NO. 50-254

QUAD CITIES NUCLEAR POWER STATION, UNIT 1

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 262 Renewed License No. DPR-29

- 1. The U.S. Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Exelon Generation Company, LLC (the licensee) dated August 18, 2015, as supplemented by letter dated April 14, 2016, 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 Renewed Facility Operating License No. DPR-29 is hereby amended to read as follows:
 - B. Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 262, are hereby incorporated into this renewed operating license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of its date of issuance and shall be implemented within 60 days.

FOR THE NUCLEAR REGULATORY COMMISSION

Sportfun

G. Edward Miller, Acting Branch Chief Plant Licensing Branch III-2 Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical Specifications and Renewed Facility Operating License

Date of Issuance May 11, 2016



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

EXELON GENERATION COMPANY, LLC

<u>AND</u>

MIDAMERICAN ENERGY COMPANY

DOCKET NO. 50-265

QUAD CITIES NUCLEAR POWER STATION, UNIT 2

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 257 Renewed License No. DPR-30

- 1. The U.S. Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Exelon Generation Company, LLC (the licensee) dated August 18, 2015, as supplemented by letter dated April 14, 2016, 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 Renewed Facility Operating License No. DPR-30 is hereby amended to read as follows:
 - B. Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 257, are hereby incorporated into this renewed operating license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of its date of issuance and shall be implemented within 60 days.

FOR THE NUCLEAR REGULATORY COMMISSION

Essis Mun

G. Edward Miller, Acting Branch Chief Plant Licensing Branch III-2 Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical Specifications and Renewed Facility Operating License

Date of Issuance: May 11, 2016

ATTACHMENT TO LICENSE AMENDMENT NOS.262 AND 257

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

DOCKET NOS. 50-254 AND 50-265

Replace the following page of the Renewed Facility Operating Licenses and Appendix A, Technical Specifications (TSs), with the attached pages. The revised pages are identified by amendment number and contains marginal lines indicating the areas of change.

Remove

Insert

License DPR-29 Page 4 License DPR-29 Page 4

License DPR-30 Page 4 License DPR-30 Page 4

<u>TSs</u> 2.0-1 <u>TSs</u> 2.0-1

B. <u>Technical Specifications</u>

The Technical Specifications contained in Appendix A, as revised through Amendment No. 262, are hereby incorporated into this renewed operating license. The licensee shall operate the facility in accordance with the Technical Specifications.

C. The licensee shall maintain the commitments made in response to the March 14, 1983, NUREG-0737 Order, subject to the following provision:

The licensee may make changes to commitments made in response to the March 14, 1983, NUREG-0737 Order without prior approval of the Commission as long as the change would be permitted without NRC approval, pursuant to the requirements of 10 CFR 50.59. Consistent with this regulation, if the change results in an Unreviewed Safety Question, a license amendment shall be submitted to the NRC staff for review and approval prior to implementation of the change.

D. Equalizer Valve Restriction

Three of the four values in the equalizer piping between the recirculation loops shall be closed at all times during reactor operation with one bypass value open to allow for thermal expansion of water.

E. The licensee shall fully implement and maintain in effect all provisions of the Commission-approved physical security, training and qualification, and safeguards contingency plans including amendments made pursuant to provisions of the Miscellaneous Amendments and Search Requirements revisions to 10 CFR 73.55 (51 FR 27817 and 27822), and the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The combined sets of plans¹, which contain Safeguards Information protected under 10 CFR 73.21, is entitled: "Quad Cities Nuclear Power Station Security Plan, Training and Qualification Plan, and Safeguards Contingency Plan, Revision 2," submitted by letter dated May 17, 2006.

Exelon Generation Company shall fully implement and maintain in effect all provisions of the Commission-approved cyber security plan (CSP), including changes made pursuant to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The Exelon Generation Company CSP was approved by License Amendment No. 249 as modified by License Amendment No. 259.

F. The licensee shall implement and maintain in effect all provisions of the approved fire protection program as described in the Updated Final Safety Analysis Report for the facility and as approved in the Safety Evaluation Reports dated July 27, 1979, with supplements dated November 5, 1980, and

¹ The Training and Qualification Plan and Safeguards Contingency Plan are Appendices to the Security Plan.

B. <u>Technical Specifications</u>

The Technical Specifications contained in Appendix A, as revised through Amendment No. 257, are hereby incorporated into this renewed operating license. The licensee shall operate the facility in accordance with the Technical Specifications.

C. The license shall maintain the commitments made in response to the March 14, 1983, NUREG-0737 Order, subject to the following provision:

The licensee may make changes to commitments made in response to the March 14, 1983, NUREG-0737 Order without prior approval of the Commission as long as the change would be permitted without NRC approval, pursuant to the requirements of 10 CFR 50.59. Consistent with this regulation, if the change results in an Unreviewed Safety Question, a license amendment shall be submitted to the NRC staff for review and approval prior to implementation of the change.

D. Equalizer Valve Restriction

Three of the four valves in the equalizer piping between the recirculation loops shall be closed at all times during reactor operation with one bypass valve open to allow for thermal expansion of water.

E. The licensee shall fully implement and maintain in effect all provisions of the Commission-approved physical security, training and qualification, and safeguards contingency plans including amendments made pursuant to provisions of the Miscellaneous Amendments and Search Requirements revisions to 10 CFR 73.55 (51 FR 27817 and 27822), and the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The combined set of plans¹, which contain Safeguards Information protected under 10 CFR 73.21, is entitled: "Quad Cities Nuclear Power Station Security Plan, Training and Qualification Plan, and Safeguards Contingency Plan, Revision 2," submitted by letter dated May 17, 2006.

Exelon Generation Company shall fully implement and maintain in effect all provisions of the Commission-approved cyber security plan (CSP), including changes made pursuant to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The Exelon Generation Company CSP was approved by License Amendment No. 244 and modified by License Amendment No. 254.

F. The licensee shall implement and maintain in effect all provisions of the approved fire protection program as described in the Updated Final Safety Analysis Report for the facility and as approved in the Safety Evaluation Reports dated July 27, 1979 with supplements dated

¹ The Training and Qualification Plan and Safeguards Contingency Plan are Appendices to the Security Plan.

2.1 SLs

- 2.1.1 Reactor Core SLs
 - 2.1.1.1 With the reactor steam dome pressure < 685 psig or core flow < 10% rated core flow:

THERMAL POWER shall be $\leq 25\%$ RTP.

2.1.1.2 With the reactor steam dome pressure ≥ 685 psig and core flow ≥ 10% rated core flow:

For Unit 1, two recirculation loop operation, MCPR shall be \geq 1.11, or for single recirculation loop operation, MCPR shall be \geq 1.14.

For Unit 2, two recirculation loop operation, MCPR shall be \geq 1.12, or for single recirculation loop operation, MCPR shall be \geq 1.14.

- 2.1.1.3 Reactor vessel water level shall be greater than the top of active irradiated fuel.
- 2.1.2 Reactor Coolant System Pressure SL

Reactor steam dome pressure shall be \leq 1345 psig.

2.2 SL Violations

With any SL violation, the following actions shall be completed within 2 hours:

2.2.1 Restore compliance with all SLs; and

2.2.2 Insert all insertable control rods.

Amendment No. 262/257



SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO

AMENDMENT NO. 209 TO FACILITY OPERATING LICENSE NO. NPF-62,

AMENDMENT NO. 250 TO RENEWED FACILITY OPERATING LICENSE NO. DPR-19,

AMENDMENT NO. 243 TO RENEWED FACILITY OPERATING LICENSE NO. DPR-25,

AMENDMENT NO. 262 TO RENEWED FACILITY OPERATING LICENSE NO. DPR-29,

AMENDMENT NO. 257 TO RENEWED FACILITY OPERATING LICENSE NO. DPR-30,

EXELON GENERATION COMPANY, LLC

CLINTON POWER STATION, UNIT NO. 1

DRESDEN NUCLEAR POWER STATION, UNITS 2 AND 3

QUAD CITIES NUCLEAR POWER STATION, UNITS 1 AND 2

DOCKET NOS. 50-461, 50-237, 50-249, 50-254, AND 50-265

1.0 INTRODUCTION

By application dated August 18, 2015, (Agencywide Documents Access and Management System (ADAMS) Accession No. ML15231A097), as supplemented by letter dated April 14, 2016 (ADAMS Accession No. ML16105A421), Exelon Generation Company, LLC (EGC, the licensee) submitted a license amendment request (LAR) for Clinton Power Station (CPS), Unit No. 1; Dresden Nuclear Power Station (DNPS), Units 2 and 3; and Quad Cities Nuclear Power Station (QCNPS), Units 1 and 2. The supplemental letter dated April 14, 2016, provided additional information that clarified the application, did not expand the scope of the application as originally noticed, and did not change the U.S. Nuclear Regulatory Commission (NRC, the Commission) staff's original proposed no significant hazards consideration determination as published in the *Federal Register* on October 27, 2015 (80 FR 65812).

The proposed amendments would reduce the reactor steam dome pressure specified in Technical Specification (TS) 2.1.1, "Reactor Core SLs [Safety Limits]," for CPS, DNPS, and QCNPS. The proposed amendments address a condition with the potential to momentarily violate the reactor core SLs during a pressure regulator failure maximum demand (open) (PRFO) transient. This condition was identified by GE Energy–Nuclear in a March 29, 2005,

notification¹ to the NRC under Title 10 of the *Code of Federal Regulations* (10 CFR) Part 21, "Reporting of Defects and Noncompliance" (GE Part 21 notification).

2.0 REGULATORY EVALUATION

2.1 Background

When the steam dome pressure is less than 785 pounds per square inch gauge (psig) or core flow is less than 10 percent of rated core flow, TS 2.1.1.1 currently requires thermal power to be less than or equal to 21.6 percent of rated thermal power (RTP) for CPS and less than or equal to 25 percent of RTP for DNPS and QCNPS. The GE Part 21 notification identified, using newer computer analysis codes, that a PRFO transient could result in a condition where the reactor steam dome pressure momentarily decreases below 785 psig while thermal power is above the plant-specific thermal power limit specified in the TS 2.1.1.1. This condition would violate the reactor core SL in TS 2.1.1.1.

Initially the Boiling Water Reactor Owners' Group (BWROG) attempted to generically resolve the issue identified in the GE Part 21 notification. On July 18, 2006, the Technical Specifications Task Force (TSTF) and the BWROG submitted TSTF-495, Revision 0, "Bases Change to Address GE Part 21 SC05-03," dated July 18, 2006 (ADAMS Accession No. ML061990227), proposing a modification to the standard TSs (STS) bases for boiling-water reactors (BWRs). This change proposed to clarify that the SL did not apply to momentary depressurization transients by revising the "Applicable Safety Analysis" portion of the STS bases for the reactor core SL (Section B 2.1.1). By letter dated August 27, 2007 (ADAMS Accession No. ML072340113), the NRC staff denied TSTF-495, Revision 0, because the proposed change to the STS bases would modify the corresponding TSs by providing an exception to the explicit SL. The staff's safety evaluation (SE) enclosed with the letter stated:

The staff agrees with the applicant's position that the PRFO transient does not threaten fuel cladding integrity, since the margin to [the SL minimum critical power ratio (MCPR)] increases with decreasing reactor pressure. However, the staff is concerned that in some depressurization events which occur at or near full power, there may be enough bundle stored energy to cause some fuel damage. If a reactor scram does not occur automatically, the operator may have insufficient time to recognize the condition and to take the appropriate actions to bring the reactor to a safe configuration.

Consequently, the BWROG discontinued its effort to resolve the issue generically. Subsequently, affected BWR licensees have proposed resolution of the GE Part 21 issue on a plant-specific basis by submittal of LARs that lower the reactor steam dome pressure SL value in the TSs. This approach takes advantage of the fact that some advanced fuel designs have a critical power correlation with a lower-bound pressure significantly below the reactor steam dome pressure currently specified in TS 2.1.1.

Currently, TS 2.1.1 for CPS, DNPS, and QCNPS specifies a reactor steam dome pressure of 785 psig. The licensee proposes in the LAR to reduce the reactor steam dome pressure consistent with the valid pressure range of the critical power correlations for the fuel designs

¹ GE Energy–Nuclear, "10CFR21 Reportable Condition Notification: Potential to Exceed Low Pressure Technical Specification Safety Limit," dated March 29, 2005 (ADAMS Accession No. ML050950428). Also identified as GE Part 21 report SC05-03.

which currently comprise the CPS, DNPS, and QCNPS cores.

2.2 Proposed Change

The licensee's proposed changes would reduce the reactor steam dome pressure specified in TS 2.1.1.1 and TS 2.1.1.2 from 785 psig to 700 pounds per square inch atmospheric (psia) for CPS and to 685 psig for DNPS and QCNPS. The revised TSs for each facility are listed below.

For CPS, TS 2.1.1.1 and TS 2.1.1.2 would be revised to read as follows:

2.1.1.1 With the reactor steam dome pressure < 700 psia or core flow < 10% rated core flow:

THERMAL POWER shall be $\leq 21.6\%$ RTP.

2.1.1.2 With the reactor steam dome pressure \geq 700 psia and core flow \geq 10% rated core flow:

MCPR shall be \geq 1.09 for two recirculation loop operation or \geq 1.12 for single recirculation loop operation.

For DNPS, TS 2.1.1.1 and TS 2.1.1.2 would be revised to read as follows:

2.1.1.1 With the reactor steam dome pressure < 685 psig or core flow < 10% rated core flow:

THERMAL POWER shall be $\leq 25\%$ RTP.

2.1.1.2 With the reactor steam dome pressure ≥ 685 psig and core flow ≥ 10% rated core flow:

For two recirculation loop operation, MCPR shall be \geq 1.12, or for single recirculation loop operation, MCPR shall be \geq 1.14.

For QCNPS, TS 2.1.1.1 and TS 2.1.1.2 would be revised to read as follows:

2.1.1.1 With the reactor steam dome pressure < 685 psig or core flow < 10% rated core flow:

THERMAL POWER shall be $\leq 25\%$ RTP.

2.1.1.2 With the reactor steam dome pressure \geq 685 psig and core flow \geq 10% rated core flow:

For Unit 1, two recirculation loop operation, MCPR shall be \ge 1.11, or for single recirculation loop operation, MCPR shall be \ge 1.14.

For Unit 2, two recirculation loop operation, MCPR shall be \ge 1.12, or for single recirculation loop operation, MCPR shall be \ge 1.14.

The licensee's application as supplemented also provided revised TS Bases pages to be implemented with the associated TS changes. These pages were provided for information only. Changes to the TS Bases would be made in accordance with the TS Bases Control Program.

2.3 Applicable Regulatory Requirements

The regulatory requirements and guidance documents that the NRC staff considered in its review of the proposed license amendments are discussed below.

The regulations in 10 CFR 50.36, "Technical specifications," establish the requirements related to the content of TSs. As stated in 10 CFR 50.36(c)(1)(i)(A):

Safety limits for nuclear reactors are limits upon important process variables that are found to be necessary to reasonably protect the integrity of certain of the physical barriers that guard against the uncontrolled release of radioactivity. If any safety limit is exceeded, the reactor must be shut down. The licensee shall notify the Commission, review the matter, and record the results of the review, including the cause of the condition and the basis for corrective action taken to preclude recurrence. Operation must not be resumed until authorized by the Commission.

Appendix A, "General Design Criteria [GDC] for Nuclear Power Plants," to 10 CFR Part 50 establishes the minimum requirements for the principal design criteria for water-cooled nuclear power plants. For each facility, Section 3.1, "Conformance with NRC General Design Criteria," of the updated final safety analysis report (UFSAR) evaluates the plant design basis against the GDC or draft GDC, as appropriate. For CPS, the UFSAR evaluation concludes that CPS fully satisfies and complies with the GDC. For DNPS and QCNPS, the UFSAR evaluation concludes that the plants fully satisfy the intent of the draft GDC published in July 1967 (ADAMS Accession No. ML043310029). The licensee states in its application that the proposed amendments satisfy the requirements of GDC 10, "Reactor design," regarding acceptable fuel design limits.

GDC 10 was considered in the NRC staff's review of the proposed amendments. GDC 10 requires the reactor core and associated coolant, control, and protection systems be designed with appropriate margin to assure that specified acceptable fuel design limits (SAFDLs) are not exceeded during any condition of normal operation, including the effects of anticipated operational occurrences (AOOs).

NUREG-0800, "Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants," provides guidance on the acceptability of the reactivity control systems, the reactor core and fuel system design. Specifically, Section 4.2, "Fuel System Design," specifies the criteria for evaluation of fuel damage and whether fuel designs meet the SAFDLs. Section 4.4, "Thermal and Hydraulic Design," provides guidance on the review of thermal-hydraulic design in meeting the requirement of GDC 10 and the fuel design criteria established in Section 4.2. It states that the critical power ratio (CPR) is to be established such that at least 99.9 percent of fuel rods in the core would not be expected to experience departure from nucleate boiling, or onset of transition boiling (OTB), during normal operation or AOOs.

3.0 TECHNICAL EVALUATION

Each fuel vendor has developed critical power correlations valid over specified pressure and

flow ranges (mass flow rates). These critical power correlations have become increasingly fuel design dependent as advanced fuel designs have evolved. The critical power correlations for some advanced fuel designs have received NRC approval, or were developed using NRC-approved methodologies, for a lower pressure than those approved previously. The lower bound of the extended pressure ranges for these advanced fuel designs can be used to justify a lower reactor steam dome pressure than specified in the TSs for previous fuel designs. As such, a wider pressure range would be available for transients to demonstrate compliance with MCPR limits. The licensee proposes to reduce the reactor steam dome pressure specified in TS 2.1.1.1 and TS 2.1.1.2 from 785 psig to 700 psia at CPS and to 685 psig at DNPS and QCNPS based on the lower-bound pressure for the critical power correlation for the fuel currently used in the reactor cores for these facilities.

The application further states:

If EGG decides to switch to a different fuel design from those currently in use in the CPS, DNPS, and QCNPS reactor cores, the CPR correlation will be reviewed as part of the normal fuel design change and reload licensing processes. If the CPR correlation for the new fuel design has a lower bound pressure which is higher than the limit specified in the TS, then a LAR will be submitted for NRC review and approval. If the CPR correlation has a lower bound pressure which is lower than the TS limit, then no LAR will be required since the TS would set a conservative lower bound.

3.1 <u>CPS</u>

In its application, the licensee stated that CPS currently has a mixed core of GE14 and GNF2 fuel produced by Global Nuclear Fuel – Americas, LLC (GNF). The CPR calculations for GE14 and GNF2 fuel use the critical power correlations known as GEXL14 and GEXL17, respectively. The GEXL14 correlation is documented in GNF report NEDC-32851P-A, "GEXL14 Correlation for GE14 Fuel," Revision 5, dated April 2011 (ADAMS Package Accession No. ML111290540). The GEXL17 correlation is documented in GNF report NEDC-33292P, "GEXL17 Correlation for GNF2 Fuel," Revision 3, dated June 2009.² As discussed in these reports, the GEXL14 and GEXL17 correlations are used in the core design to determine the expected thermal margin for the operating cycle. In the safety analysis process, the correlations are used to determine the change in CPR during postulated transients and to determine the MCPR SL.

The acceptability of the GEXL14 and GEXL17 correlations is associated with the NRC-approved GNF Licensing Topical Report (LTR) NEDE-24011-P-A, "General Electric Standard Application for Reactor Fuel" (referred to as GESTAR II). This LTR provides generic information relative to the fuel design and analyses of BWRs that use the GE and GNF fuel designs. This LTR consists of a description of the fuel licensing criteria and fuel thermal-mechanical, nuclear, and thermal-hydraulic analyses bases. In accordance with TS 5.6.5, "Core Operating Limits Report (COLR)," CPS may use the analytical methods in versions of GESTAR II which have been previously reviewed and approved by the NRC to determine the core operating limits.

GESTAR II includes a methodology for development of critical power correlations, and also contains criteria for when NRC approval of new critical power correlations is needed. The

² This proprietary report was submitted to the NRC by letter dated June 30, 2009 (ADAMS Accession No. ML091830614). A public version of the report was included with the submittal and is available at ADAMS Accession No. ML091830624.

GEXL14 correlation report was approved by the NRC staff, and a copy of the associated NRC staff's SE is included with NEDC-2351P-A. The GEXL17 correlation report did not require NRC approval. The acceptability of the GEXL17 correlation is based on the staff's approval of Amendment 33 to GESTAR II.³ In a letter dated March 5, 2010 (ADAMS Package Accession No. ML100700464), GNF submitted proposed Amendment No. 33 to GESTAR II for NRC review and approval. The letter also provided GNF report NEDC-33270P, "GNF2 Advantage Generic Compliance with NEDE-24011-P-A (GESTAR II)," Revision 3, dated March 2010. NEDC-33270P documented the completion of the requirements for the new GNF2 fuel design per the criteria in GESTAR II, including an explanation of how the development of the GEXL17 correlation complied with the GESTAR II methodology. Based on this, the NRC staff considers the use of GEXL14 and GEXL17 correlations for GE14 and GNF2 fuel, respectively, to be acceptable for use in CPR calculations at CPS.

The GEXL14 and GEXL17 correlation reports specify the pressure range over which the critical power correlations are valid for the GE14 fuel and GNF2 fuel, respectively. The licensee's application proposed to reduce the reactor steam dome pressure specified in CPS TS 2.1.1.1 and TS 2.1.1.2 to 685 psig, which is approximately 699.7 psia. Since 699.7 psia is outside the pressure range in which the GEXL14 and GEXL17 correlations are valid for GE14 and GNF2 fuel, the NRC staff requested, by letter dated March 15, 2016 (ADAMS Accession No. ML16071A206), that the licensee provide further justification for this value. In its letter dated April 14, 2016, the licensee revised its application and proposed a reactor steam dome pressure limit of 700 psia instead of 685 psig. The proposed 700 psia value is consistent with the pressure range over which the critical power correlations are valid for both the GE14 fuel and GNF2 fuel. Therefore, the NRC staff determined that the proposed 700 psia limit for TS 2.1.1.1 and TS 2.1.1.2 is acceptable for the fuel in the CPS core.

The proposed TS 2.1.1.1 requires thermal power to be less than or equal to 21.6 percent RTP when the reactor steam dome pressure is less than 700 psia or core flow is less than 10 percent rated core flow. The proposed 2.1.1.2 specifies MCPR limits when the reactor steam dome pressure is greater than or equal to 700 psia and core flow is less than 10 percent rated core flow. The licensee stated in its application that it has performed a plant-specific evaluation that demonstrates the current low-pressure isolation setpoint (LPIS) at CPS is sufficient to preclude steam dome pressure from falling below 700 psia value for TS 2.1.1.1 and TS 2.1.1.2 is below the lowest minimum dome pressure determined from limiting conditions for the PRFO transient analysed for CPS. Based on this, the NRC staff determined that the proposed change would resolve the GE Part 21 concern for CPS regarding the potential to exceed a SL during a PRFO transient while still protecting the fuel.

3.2 DNPS and QCNPS

In its application, the licensee stated that DNPS and QCNPS currently have full cores of Westinghouse SVEA-96 Optima2 fuel. The applicable CPR correlation, including a copy of the NRC staff's approval, is documented in Westinghouse report WCAP-16081-P-A, Revision 0, "10x10 SVEA Fuel Critical Power Experiments and CPR Correlation: SVEA-96 Optima2," dated March 2005 (ADAMS Package Accession No. ML051260164). For both DNPS and QCNPS, TS 5.6.5 states that this report is an NRC-approved analytical method which can be used to establish core operating limits at these facilities. As discussed in Section 3.0 of the application,

³ Amendment No. 33 was incorporated in Revision 17 to NEDE-24011-P-A by GNF letter dated September 22, 2010 (ADAMS Package Accession No. ML102660094). A copy of the NRC staff's approval and SE for Amendment No. 33 is included in NEDE-24011-P-A.

the lower bound pressure limit for the Optima2 fuel is 362 psia. The proposed 685 psig reactor steam dome pressure limit is within the pressure range over which the critical power correlations are valid for the Optima2 fuel. Therefore, the NRC staff determined that the proposed 685 psig limit for TS 2.1.1.1 and TS 2.1.1.2 is acceptable for the fuel in the DNPS and QCNPS cores.

For DNPS and QCNPS, the proposed TS 2.1.1.1 requires thermal power to be less than or equal to 25 percent RTP when the reactor steam dome pressure is less than 685 psig or core flow is less than 10 percent rated core flow. The proposed 2.1.1.2 for both plants specify MCPR limits when the reactor steam dome pressure is greater than or equal to 685 psig and core flow is less than 10 percent rated core flow. As stated in the application, the licensee performed an evaluation which demonstrated that the current LPIS settings at DNPS and QCNPS are sufficient to preclude steam dome pressure from falling below 685 psig while above 25 percent RTP. Thus, the proposed 685 psig value for TS 2.1.1.1 and TS 2.1.1.2 is below the lowest minimum dome pressure determined from limiting conditions for the PRFO transient analysed for DNPS and QCNPS. Based on this, the NRC staff determined that the proposed change would resolve the GE Part 21 concern for DNPS and QCNPS regarding the potential to exceed a SL during a PRFO transient while still protecting the fuel.

In November 2016, EGC plans to begin transitioning from Westinghouse SVEA-96 Optima2 fuel to AREVA ATRIUM-10XM fuel at DNPS and QCNPS. A separate LAR (ADAMS Accession No. ML15043A489) is currently under review by the NRC staff related to this fuel transition. The staff's review of the proposed changes to TS 2.1.1 (i.e., the licensee's August 18, 2015, LAR, as supplemented on April 14, 2016), was limited to the Westinghouse SVEA-96 Optima2 fuel currently within the DNPS and QCNPS cores, and did not consider the transition to AREVA fuel. As stated previously, the licensee will determine if the SLs need to be revised to transition to a different fuel design.

3.3 Technical Conclusion

Based on the above, the NRC staff concludes that as long as the core pressure and flow are within the range of validity of the critical power correlation applicable to the current CPS, DNPS, and QCNPS reactor cores the proposed changes to TS 2.1.1.1 and TS 2.1.1.2 provide reasonable assurance that 99.9 percent of the fuel rods in the core are not expected to experience OTB during normal operation or AOOs. As such, the SLs will continue to ensure that SAFDLs are not exceeded during normal operation or AOOs, consistent with the requirements in GDC 10. Furthermore, the NRC staff concludes that the proposed changes establish reactor core SLs that are reasonably certain to protect the integrity of the fuel cladding barrier and guard against an uncontrolled release of radioactivity, consistent with the requirements in 10 CFR 50.36(c)(1). Therefore, the staff concludes that the proposed amendments are acceptable.

The NRC staff notes that if CPS, DNPS, or QCNPS transition to a new fuel design, the licensee should review the critical power correlation to determine if further changes to the reactor core SLs are required. As long as the lower bound pressure associated with the correlation for the new fuel design is less than or equal to the TS 2.1.1.1 and TS 2.1.1.2 reactor steam dome pressure, then an LAR would not be required. However, if the lower bound pressure associated with the reactor steam dome pressure specified in TS 2.1.1.1 and TS 2.1.1.2, an LAR would be required.

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 installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and changes surveillance requirements. 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 (80 FR 65812; October 27, 2015). 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 <u>CONCLUSION</u>

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) there is reasonable assurance that such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: M. M. Razzaque, NRR/DSS/SRXB

Date of issuance: May 11, 2016

B. Hanson

A copy of our safety evaluation is also enclosed. The Notice of Issuance will be included in the Commission's biweekly *Federal Register* notice.

Sincerely,

/RA/

Blake Purnell, Project Manager Plant Licensing Branch III-2 Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

Docket Nos. 50-461, 50-237, 50-249, 50-254, and 50-265

Enclosures:

- 1. Amendment No. 209 to NPF-62
- 2. Amendment No. 250 to DPR-19
- 3. Amendment No. 243 to DPR-25
- 4. Amendment No. 262 to DPR-29
- 5. Amendment No. 257 to DPR-30
- 6. Safety Evaluation

cc w/encls: Distribution via Listserv

DISTRIBUTION:

PUBLIC LPL 3-2 R/F RidsNrrDssSrxb Resource RidsNrrDssStsb Resource RidsNrrDorlLpl3-2 Resource RidsAcrs_MailCTR Resource RidsNrrPMExelon RidsNrrPMClinton Resource RidsRgn3MailCenter Resource RidsNrrPMDresden Resource RidsNrrPMQuadCities Resource RidsNrrMailCenter Resource RidsNrrLASRohrer Resource RecordsAmend Resource MRazzaque, NRR

ADAMS Accession No: ML16111A104

*by email

OFFICE	LPL3-2/PM	LPL3-2/LA	SRXB/BC	STSB/BC
NAME	BPurnell	SRohrer	EOesterle*	AKlein
DATE	4/22/16	4/21/16	4/20/16	4/29/16
OFFICE	OGC	LPL3-2/BC(A)	LPL3-2/PM	
NAME	STurk	G.EMiller	BPurnell	
DATE	5/3/16	5/11/16	5/11/16	

OFFICIAL RECORD COPY