

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

August 10, 2011

Mr. Michael J. Pacilio President and Chief Nuclear Officer Exelon Nuclear 4300 Winfield Road Warrenville, IL 60555

SUBJECT:

BRAIDWOOD STATION, UNITS 1 AND 2; BYRON STATION, UNIT NOS. 1 AND 2; CLINTON POWER STATION, UNIT NO. 1; DRESDEN NUCLEAR POWER STATION, UNITS 2 AND 3; LASALLE COUNTY STATION, UNITS 1 AND 2; LIMERICK GENERATING STATION, UNITS 1 AND 2; OYSTER CREEK NUCLEAR GENERATING STATION; PEACH BOTTOM ATOMIC POWER STATION, UNITS 2 AND 3; QUAD CITIES NUCLEAR POWER STATION, UNITS 1 AND 2; AND THREE MILE ISLAND NUCLEAR STATION, UNIT 1 - ISSUANCE OF AMENDMENTS REGARDING THE EXELON CYBER SECURITY PLAN (TAC NOS. ME4298, ME4299, ME4300, ME4301, ME4302, ME4303, ME4304, ME4305, ME4306, ME4307, ME4308, ME4309, ME4310, ME4311, ME4312, ME4313, AND ME4314)

Dear Mr. Pacilio:

The U.S. Nuclear Regulatory Commission (NRC) has issued the enclosed Amendment No. 168 to Facility Operating License (FOL) No. NPF-72 and Amendment No. 168 to FOL No. NPF-77 for Braidwood Station, Units 1 and 2, respectively, and Amendment No. 175 to FOL No. NPF-37 and Amendment No. 175 to FOL No. NPF-66 for Byron Station, Unit Nos. 1 and 2, respectively, and Amendment No. 194 to FOL No. NPF-62 for Clinton Power Station, Unit No. 1, and Amendment No. 238 to Renewed FOL No. DPR-19 and Amendment No. 231 to Renewed FOL No. DPR-25 for Dresden Nuclear Power Station, Units 2 and 3, respectively, and Amendment No. 203 to FOL No. NPF-11 and Amendment No. 190 to FOL No. NPF-18 for LaSalle County Station, Units 1 and 2, respectively, and Amendment No. 204 to FOL No. NPF-39 and Amendment No. 166 to FOL No. NPF-85 for Limerick Generating Station, Units 1 and 2, respectively, and Amendment No. 280 to Renewed FOL No. DPR-16 for Oyster Creek Nuclear Generating Station, and Amendment No.281 to Renewed FOL No. DPR-44 and Amendment No. 283 to Renewed FOL No. DPR-56 for Peach Bottom Atomic Power Station, Units 2 and 3, respectively, and Amendment No. 249 to Renewed FOL No. DPR-29 and Amendment No. 244 to Renewed FOL No. DPR-30 for Quad Cities Nuclear Power Station, Units 1 and 2, respectively, and Amendment No. 275 to Renewed FOL No. DPR-50 for Three Mile Island Nuclear Station, Unit 1. The amendments are in response to your application dated November 23, 2009, as supplemented by your letters dated January 15, July 23, September 24, November 18, December 21, 2010, March 31, May 19, and July 11, 2011.

The amendments approve the Cyber Security Plan (CSP) and associated implementation schedule for the plants listed above. In addition, the amendments revise the existing license condition regarding physical protection in each of the FOLs to require the licensee to fully implement and maintain in effect all provisions of the NRC-approved CSP.

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,

Joel S. Wiebe, Senior Project Manager

Plant Licensing Branch III-2

Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

Docket Nos. STN 50-456, STN 50-457, STN 50-454, STN 50-455, 50-461, 50-237, 50-249, 50-373, 50-374, 50-352, 50-353, 50-219, 50-277, 50-278, 50-254, 50-265, and 50-289

#### **Enclosures:**

- 1. Amendment No. 168 to NPF-72
- 2. Amendment No. 168 to NPF-77
- 3. Amendment No. 175 to NPF-37
- 4. Amendment No. 175 to NPF-66
- 5. Amendment No. 194 to DPR-62
- 6. Amendment No. 238 to DPR-19
- 7. Amendment No. 231 to DPR-25
- 8. Amendment No. 203 to NPF-11
- 9. Amendment No. 190 to NPF-18
- 10. Amendment No. 204 to NPF-39
- 11. Amendment No. 166 to NPF-85
- 12 Amendment No. 280 to DPR-16
- 13. Amendment No. 281 to DPR-44
- 14. Amendment No. 283 to DPR-56
- 15. Amendment No. 249 to DPR-29
- 16. Amendment No. 244 to DPR-30
- 17. Amendment No. 275 to DPR-50
- 18. Safety Evaluation

cc w/encls: Distribution via Listserv



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

### **EXELON GENERATION COMPANY, LLC**

### DOCKET NO. STN 50-456

### **BRAIDWOOD STATION, UNIT 1**

### AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 168 License No. NPF-72

- 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 November 23, 2009, as supplemented by your letters dated July 23, September 24, November 18, and December 21, 2010, March 31, May 19, 2011, and July 11, 2011, 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 Facility Operating License No. NPF-72 is hereby amended to add the following to paragraph 2.F:

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. 168.

FOR THE NUCLEAR REGULATORY COMMISSION

Jacob I. Zimmerman, Chief Dant Licensing Branch III-2

Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

Attachment: Changes to the Facility Operating License



WASHINGTON, D.C. 20555-0001

# EXELON GENERATION COMPANY, LLC DOCKET NO. STN 50-457

### **BRAIDWOOD STATION, UNIT 2**

#### AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 168 License No. NPF-77

- 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 November 23, 2009, as supplemented by your letters dated July 23, September 24, November 18, and December 21, 2010, March 31, May 19, 2011, and July 11, 2011, 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 Facility Operating License No. NPF-77 is hereby amended to add the following to paragraph 2.F:

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. 168.

FOR THE NUCLEAR REGULATORY COMMISSION

Jacob I. Zimmerman, Chief Plant Licensing Branch III-2

Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

Attachment: Changes to the Facility Operating License

### ATTACHMENT TO LICENSE AMENDMENT NOS. 168 AND 168

### FACILITY OPERATING LICENSE NOS. NPF-72 AND NPF-77

### **DOCKET NOS. STN 50-456 AND STN 50-457**

Replace the following pages of the Facility Operating Licenses with the attached pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

Remove Insert

<u>License NPF-72</u> <u>License NPF-72</u>

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<u>License NPF-77</u> <u>License NPF-77</u>

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F. Exelon Generation Company shall fully implement and maintain in effect all provisions of the Commission-approved physical security, training and qualifications, 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 plans<sup>1</sup>. which contain Safeguards Information protected under 10 CFR 73.21, is entitled: "Braidwood Station Security Plan, Training and Qualification Plan, and Safeguards Contingency Plan, Revision 3," 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. 168.

- G. Deleted
- Η. The licensee shall have and maintain financial protection of such type and in such amounts as the Commission shall require in accordance with Section 170 of the Atomic Energy Act of 1954, as amended, to cover public liability claims.
- 1. This license is effective as of the date of issuance and shall expire at midnight on October 17, 2026.

### FOR THE NUCLEAR REGULATORY COMMISSION

original signed by:

Thomas E. Murley, Director Office of Nuclear Reactor Regulation

#### Attachments:

- 1. Appendix A Technical Specifications (NUREG-1276)
- 2. Appendix B Environmental Protection Plan
- 3. Appendix C Additional Conditions

Date of Issuance: July 2, 1987

<sup>&</sup>lt;sup>1</sup> The training and Qualification Plan and Safeguards Contingency Plan are Appendices to the Security Plan.

F. Exelon Generation Company shall fully implement and maintain in effect all provisions of the Commission-approved physical security, training and qualifications, 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 plans<sup>1</sup>, which contain Safeguards Information protected under 10 CFR 73.21, is entitled: "Braidwood Station Security Plan, Training and Qualification Plan, and Safeguards Contingency Plan, Revision 3," 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. 168.

- G. Deleted
- H. The licensee shall have and maintain financial protection of such type and in such amounts as the Commission shall require in accordance with Section 170 of the Atomic Energy Act of 1954, as amended, to cover public liability claims.
- I. This license is effective as of the date of issuance and shall expire at midnight on December 18, 2027.

FOR THE NUCLEAR REGULATORY COMMISSION

original signed by:

James H. Sniezek, Deputy Director Office of Nuclear Reactor Regulation

### Attachments:

- 1. Appendix A Technical Specifications (NUREG-1276)
- 2. Appendix B Environmental Protection Plan
- 3. Appendix C Additional Conditions

Date of Issuance: May 20, 1988

<sup>&</sup>lt;sup>1</sup> The training and Qualification Plan and Safeguards Contingency Plan are Appendices to the Security Plan.



WASHINGTON, D.C. 20555-0001

### EXELON GENERATION COMPANY, LLC

### DOCKET NO. STN 50-454

### BYRON STATION, UNIT NO. 1

### AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 175 License No. NPF-37

- 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 November 23, 2009, as supplemented by your letters dated July 23, September 24, November 18, December 21, 2010, March 31, May 19, 2011, and July 11, 2011, 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 Facility Operating License No. NPF-37 is hereby amended to add the following to paragraph 2.E:

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. 175.

FOR THE NUCLEAR REGULATORY COMMISSION

Jacob I. Zimmerman, Chief Plant Licensing Branch III-2

Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

Attachment: Changes to the Facility Operating License



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

### EXELON GENERATION COMPANY, LLC

### DOCKET NO. STN 50-455

### BYRON STATION, UNIT NO. 2

### AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 175 License No. NPF-66

- 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 November 23, 2009, as supplemented by your letters dated July 23, September 24, November 18, December 21, 2010, March 31, May 19, 2011, and July 11, 2011, 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.
- Accordingly, the Facility Operating License No. NPF-66 is hereby amended to add the following to paragraph 2.F:

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. 175.

FOR THE NUCLEAR REGULATORY COMMISSION

Jacob I. Zimmerman, Chief Plant Licensing Branch III-2

Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

Attachment: Changes to the Facility Operating License

### ATTACHMENT TO LICENSE AMENDMENT NOS. 175 AND 175

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

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

Replace the following pages of the Facility Operating Licenses with the attached pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

Remove Insert

<u>License NPF-37</u> <u>License NPF-37</u>

Page 4b Page 4b

<u>License NPF-66</u> <u>License NPF-66</u>

Page 4b Page 4b

### (22) <u>Mitigation Strategy License Condition</u>

Develop and maintain strategies for addressing large fires and explosions and that include the following key areas:

- (a) Fire fighting response strategy with the following elements:
  - 1. Pre-defined coordinated fire response strategy and guidance
  - 2. Assessment of mutual aid fire fighting assets
  - 3. Designated staging areas for equipment and materials
  - 4. Command and control
  - 5. Training of response personnel
- (b) Operations to mitigate fuel damage considering the following:
  - 1. Protection and use of personnel assets
  - 2. Communications
  - 3. Minimizing fire spread
  - 4. Procedures for implementing integrated fire response strategy
  - 5. Identification of readily-available pre-staged equipment
  - 6. Training on integrated fire response strategy
  - 7. Spent fuel pool mitigation measures
- (c) Actions to minimize release to include consideration of:
  - 1. Water spray scrubbing
  - 2. Dose to onsite responders
- D. The facility requires no exemptions from the requirements of 10 CFR Part 50.
- E. Exelon Generation Company 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 plans<sup>1</sup>, which contain Safeguards Information protected under 10 CFR 73.21, is entitled: "Byron Nuclear Power Station Security Plan, Training and Qualification Plan, and Safeguards Contingency Plan, Revision 3," 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. 175.

<sup>&</sup>lt;sup>1</sup>The training and Qualification Plan and Safeguards Contingency Plan are Appendices to the Security Plan

- (c) Actions to minimize release to include consideration of:
  - 1. Water spray scrubbing
  - 2. Dose to onsite responders
- D. The facility requires no exemptions from the requirements of 10 CFR Part 50.

An exemption was previously granted pursuant to 10 CFR 70.24. The exemption was granted with NRC materials license No. SNM-1916, issued March 4, 1985, and relieved the licensee from the requirement of having a criticality alarm system. Therefore, the licensee is exempted from the criticality alarm system provision of 10 CFR 70.24 so far as this section applies to the storage of fuel assemblies held under this licensee.

E. The licensee shall implement and maintain in effect all provisions of the approved fire protection program as described in the licensee's Fire Protection Report and the licensee's letters dated September 23, 1986, October 23, 1986, November 3, 1986, December 12 and 15, 1986, and January 21, 1987, and as approved in the SER dated February 1982 through Supplement No. 8, subject to the following provision:

The licensee may make changes to the approved fire protection program without prior approval of the Commission only if those changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.

F. Exelon Generation Company shall fully implement and maintain in effect all provisions of the Commission-approved physical security, training and qualifications, 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 plans<sup>1</sup>, which contain Safeguards Information protected under 10 CFR 73.21, is entitled: "Byron Nuclear Power Station Security Plan, Training and Qualification Plan, and Safeguards Contingency Plan, Revision 3," 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.175.

G. Deleted

<sup>&</sup>lt;sup>1</sup>The training and Qualification Plan and Safeguards Contingency Plan are Appendices to the Security Plan



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. 194 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 November 23, 2009, as supplemented by your letters dated July 23, September 24, November 18, December 21, 2010, March 31, May 9, 2011, and July 11, 2011, 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 Facility Operating License No. NPF-62 is hereby amended to add the following to paragraph 2.E:

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. 194.

FOR THE NUCLEAR REGULATORY COMMISSION

Jacob I. Zimmerman, Chief Bant Licensing Branch III-2

Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

Attachment: Changes to the Facility Operating License

### ATTACHMENT TO LICENSE AMENDMENT NO. 194

### FACILITY OPERATING LICENSE NO. NPF-62

### **DOCKET NO. 50-461**

Replace the following page of the Facility Operating License with the enclosed page. The revised page is identified by amendment number and contains marginal lines indicating the areas of change.

Remove Insert

<u>License NPF-62</u> <u>License NPF-62</u>

Page 8 Page 8

An exemption was previously granted pursuant to 10 CFR 70.24. The exemption was granted with NRC Material License No. SNM-1886, issued November 27, 1985, and relieved the licensee from the requirement of having a criticality alarm system. Exelon Generation Company is hereby exempted from the criticality alarm system provision of 10 CFR 70.24 so far as this section applies to the storage of fuel assemblies held under this license.

These exemptions are authorized by law, will not present an undue risk to the public health and safety, and are consistent with the common defense and security. The exemptions in items (b) and (c) above are granted pursuant to 10 CFR 50.12. With these exemptions, the facility will operate, to the extent authorized herein, in conformity with the application, as amended, the provisions of the Act, and the rules and regulations of the Commission.

E. Exelon Generation Company 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 plans which contain Safeguards Information protected under 10 CFR 73.21, is entitled: "Clinton 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. 194.

F. Exelon Generation Company shall implement and maintain in effect all provisions of the approved fire protection program as described in the Final Safety Analysis Report as amended, for the Clinton Power Station, Unit No.1, and as approved in the Safety Evaluation Report (NUREG-0853) dated February 1982 and Supplement Nos. 1 thru 8 thereto subject to the following provision:

Exelon Generation Company may make changes to the approved fire protection program without prior approval of the Commission only if those changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.

G. Deleted.

<sup>&</sup>lt;sup>1</sup>The Training and Qualification Plan and Safeguards Contingency Plan are Appendices to the Security Plan.



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. 238 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 November 23, 2009, as supplemented by your letters dated July 23, September 24, November 18, December 21, 2010, March 31, May 19, 2011, and July 11, 2011, 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 Renewed Facility Operating License No. DPR-19 is hereby amended to add the following to paragraph 2.F:

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. 238.

FOR THE NUCLEAR REGULATORY COMMISSION

Jecob I. Zimmerman, Chief Plant Licensing Branch III-2

Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

Attachment: Changes to the

Renewed Facility Operating License



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. 231 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 November 23, 2009, as supplemented by your letters dated July 23, September 24, November 18, December 21, 2010, March 31, May 19, 2011, and July 11, 2011, 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 Renewed Facility Operating License No. DPR-25 is hereby amended to add the following to paragraph 2.H:

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. 231.

FOR THE NUCLEAR REGULATORY COMMISSION

Jacob I. Zimmerman, Chief Plant Licensing Branch III-2

Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

Attachment: Changes to the

Renewed Facility Operating License

### ATTACHMENT TO LICENSE AMENDMENT NOS. 238 AND 231

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

### **DOCKET NOS. 50-237 AND 50-249**

Replace the following pages of the Facility Operating Licenses with the attached pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

Remove Insert

<u>License DPR-19</u> <u>License DPR-19</u>

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<u>License DPR-25</u> <u>License DPR-25</u>

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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 plans<sup>1</sup>, which contain Safeguards Information protected under 10 CFR 73.21, is entitled: "Dresden 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. 238.

- G. Deleted
- H. The licensee shall have and maintain financial protection of such type and in such amounts as the Commission shall require in accordance with Section 170 of the Atomic Energy Act of 1954, as amended, to cover public liability claims.
- I. Updated Final Safety Analysis Report

The Exelon Generation Company, LLC Updated Final Safety Analysis Report supplement, submitted pursuant to 10 CFR 54.21(d), describes certain future activities to be completed prior to the period of extended operation. The Exelon Generation Company, LLC shall complete these activities no later than December 22, 2009, and shall notify the NRC in writing when implementation of these activities is complete and can be verified by NRC inspection.

The Updated Final Safety Analysis Report supplement, as revised, shall be included in the next scheduled update to the Updated Final Safety Analysis Report required by 10 CFR 50.71(e)(4) following issuance of this renewed license. Until that update is complete, Exelon Generation Company, LLC may make changes to the programs and activities described in the supplement without prior Commission approval, provided that Exelon Generation Company, LLC evaluates such change pursuant to the criteria set forth in 10 CFR 50.59 and otherwise complies with the requirements in that section.

J. All capsules in the reactor vessel that are removed and tested must meet the test procedures and reporting requirements of ASTM E 185-82 to the extent practicable for the configuration of the specimens in the capsule. Any changes to the capsule withdrawal schedule, including spare capsules, must be approved by the NRC prior to implementation. All capsules placed in storage must be maintained for future insertion.

<sup>1</sup>The Training and Qualification Plan and Safeguards Contingency Plan are Appendices to the Security Plan.

Renewed License No. DPR-19 Amendment No. 238 F. 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.

G. 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 March 22, 1978 with supplements dated December 2, 1980, and February 12, 1981; January 19, 1983; July 17, 1987; September 28, 1987; and January 5, 1989, subject to the following provision:

The licensee may make changes to the approved fire protection program without prior approval of the Commission only if those changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.

### H. Physical Protection

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 plans<sup>1</sup>, which contain Safeguards Information protected under 10 CFR 73.21, is entitled: "Dresden 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. 231.

<sup>&</sup>lt;sup>1</sup> The Training and Qualification Plan and Safeguards Contingency Plan are Appendices to the Security Plan.

- I. Deleted
- J. Deleted
- K. Deleted
- L. Deleted [Amdt. 87, 7-24-86]



WASHINGTON, D.C. 20555-0001

### EXELON GENERATION COMPANY, LLC

### **DOCKET NO. 50-373**

### LASALLE COUNTY STATION, UNIT 1

#### AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 203 License No. NPF-11

- 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 November 23, 2009, as supplemented by your letters dated July 23, September 24, November 18, December 21, 2010, March 31, May 19, 2011, and July 11, 2011, 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 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 set forth in 10 CFR Chapter I;
  - 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 Facility Operating License No. NPF-11 is hereby amended to add the following to paragraph 2.C.(27):

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. 203.

FOR THE NUCLEAR REGULATORY COMMISSION

Jacob I. Zimmerman, Chief Plant Licensing Branch III-2

Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

Attachment: Changes to the Facility Operating License



WASHINGTON, D.C. 20555-0001

#### EXELON GENERATION COMPANY, LLC

### **DOCKET NO. 50-374**

### LASALLE COUNTY STATION, UNIT 2

### AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 190 License No. NPF-18

- 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 November 23, 2009, as supplemented by your letters dated July 23, September 24, November 18, December 21, 2010, March 31, May 19, 2011, and July 11, 2011, 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 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 set forth in 10 CFR Chapter I;
  - 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 Facility Operating License No. NPF-18 is hereby amended to add the following to paragraph 2.C.(16):

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. 190.

FOR THE NUCLEAR REGULATORY COMMISSION

Jacob I. Zimmerman, Chief

Plant Licensing Branch III-2 Division of Operating Reactor Licensing

Office of Nuclear Reactor Regulation

Attachment: Changes to the Facility Operating License

### ATTACHMENT TO LICENSE AMENDMENT NOS. 203 AND 190

### FACILITY OPERATING LICENSE NOS. NPF-11 AND NPF-18

### **DOCKET NOS. 50-373 AND 50-374**

Replace the following pages of the Facility Operating Licenses with the enclosed pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

<u>License NPF-11</u>
Page 6

License NPF-11
Page 6

<u>License NPF-18</u>
Page 5

<u>License NPF-18</u>
Page 5

Am. 203

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. 203.

- (28) DELETED
- (29) DELETED
- (30) DELETED
- (31) DELETED
- (32) DELETED
- (33) DELETED

Am. 103 04/13/95

- (34) DELETED
- (35) DELETED
- (36) DELETED

Am. 147 03/30/01

(37) DELETED

Am. 146 01/12/01 (38) Exelon Generation Company, LLC shall provide the Director of the Office of Nuclear Reactor Regulation a copy of any application, at the time it is filed, to transfer (excluding grants of security interests or liens) from Exelon Generation Company, LLC to its direct or indirect parent, or to any other affiliated company, facilities for the production, transmission, or distribution of electric energy having a depreciated book valve exceeding ten percent (10%) of Exelon Generation Company, LLC's consolidated net utility plant, as recorded on Exelon Generation Company, LLC's books of account.

Am. 146 01/12/01 (39)

Exelon Generation Company, LLC shall have decommissioning trust funds, for LaSalle Unit 1, in the following minimum amount, when LaSalle, Unit 1, is transferred to Exelon Generation Company, LLC:

LaSalle, Unit 1

\$226,262,522

### Letter dated 05/16/07

(16) Industrial Security (Section 13.6, SER, SSER #3, SSER #5)

Exelon Generation Company 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 plans<sup>8</sup>, which contain Safeguards Information protected under 10 CFR 73.21, is entitled: "LaSalle County Station Security Plan, Training and Qualification Plan, and Safeguards Contingency Plan, Revision 5," submitted by letter dated May 17, 2006.

### Am. 190

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. 190

- (17) DELETED
- (18) DELETED
- (19) DELETED
- (20) DELETED
- Am. 133 03/30/01
- (21) Deleted.
- Am. 132 01/12/01
- (22) EGC shall provide the Director of the Office of Nuclear Reactor Regulation a copy of any application, at the time it is filed, to transfer (excluding grants of security interests or liens) from EGC to its direct or indirect parent, or to any other affiliated company, facilities for the production, transmission, or distribution of electric energy having a depreciated book valve exceeding ten percent (10%) of EGC's consolidated net utility plant, as recorded on EGC's books of account.
- Am. 132 01/12/01

(23) EGC shall have decommissioning trust funds for LaSalle, Unit 2, in the following minimum amount, when LaSalle, Unit 2, is transferred to EGC:

LaSalle, Unit 2

\$221,885,059

Amendment No. 190

<sup>&</sup>lt;sup>8</sup> The Training and Qualification Plan and Safeguards Contingency Plan are Appendices to the Security Plan



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

#### EXELON GENERATION COMPANY, LLC

### **DOCKET NO. 50-352**

#### LIMERICK GENERATING STATION, UNIT 1

### AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 204 License No. NPF-39

- 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 November 23, 2009, as supplemented by your letters dated July 23, September 24, November 18, December 21, 2010, March 31, May 19, 2011, and July 11, 2011, 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 Facility Operating License No. NPF-39 is hereby amended to add the following to paragraph 2.E:

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. 204.

3. This license amendment is effective as of the date of its issuance. The implementation of the CSP, including the key intermediate milestone dates and the full implementation date, shall be in accordance with the implementation schedule submitted by the licensee on March 31, 2011, and approved by the NRC staff with this license amendment. All subsequent changes to the NRC-approved CSP implementation schedule will require prior NRC approval pursuant to 10 CFR 50.90.

FOR THE NUCLEAR REGULATORY COMMISSION

Jacob I. Zimmerman, Chief Plant Licensing Branch III-2

Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

Attachment: Changes to the Facility Operating License

Date: August 10, 2011

# ATTACHMENT TO LICENSE AMENDMENT NO. 204

# FACILITY OPERATING LICENSE NO. NPF-39

# **DOCKET NO. 50-352**

Replace the following page of the Facility Operating License with the enclosed page. The revised page is identified by amendment number and contains marginal lines indicating the areas of change.

Remove

Insert

License NPF-39

License NPF-39

Page 9

Page 9

life or property or the common defense and security and are otherwise in the public interest. Therefore these exemptions are hereby granted pursuant to 10 CFR 50.12 and 50.47(c). With the granting of these exemptions the facility will operate, to the extent authorized herein, in conformity with the application, as amended, the provision of the Act, and the rules and regulations of the Commission.

E. Exelon Generation Company 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 plans<sup>1</sup>, submitted by letter, dated May 17, 2006, is entitled: "Limerick Generating Station Security Plan, Training and Qualification Plan, and Safeguards Contingency Plan, Revision 2." The set contains Safeguards Information protected under 10 CFR 73.21.

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. 204.

- F. Deleted
- G. The licensee shall have and maintain financial protection of such type and in such amounts as the Commission shall require in accordance with Section 170 of the Atomic Energy Act of 1954, as amended, to cover public liability claims.
- Н. This license is effective as of the date of issuance and shall expire at midnight on October 26, 2024.

FOR THE NUCLEAR REGULATORY COMMISSION

original signed by Darrell Eisenhut for

Harold R. Denton, Director Office of Nuclear Reactor Regulation

### Attachments/Appendices:

- 1. Attachments 1-2
- 2. Appendix A Technical Specifications (NUREG-1149)
- 3. Appendix B Environmental Protection Plan
- 4. Appendix C Additional Conditions

Date of Issuance: August 8, 1985

Amendment No. 9, 128, 131, 181, 188, 204 Revised by letter dated October 28, 2004 Revised by letter dated December 10, 2004 Revised by letter dated May 31, 2007

<sup>&</sup>lt;sup>1</sup> The Training and Qualification Plan and Safeguards Contingency Plan are Appendices to the Security Plan.



# UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

### **EXELON GENERATION COMPANY, LLC**

### **DOCKET NO. 50-353**

#### LIMERICK GENERATING STATION, UNIT 2

### AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 166 License No. NPF-85

- 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 November 23, 2009, as supplemented by your letters dated July 23, September 24, November 18, December 21, 2010, March 31, May 19, 2011, and July 11, 2011, 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 Facility Operating License No. NPF-85 is hereby amended to add the following to paragraph 2.C.(4):

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. 166.

3. This license amendment is effective as of the date of its issuance. The implementation of the CSP, including the key intermediate milestone dates and the full implementation date, shall be in accordance with the implementation schedule submitted by the licensee on March 31, 2011, and approved by the NRC staff with this license amendment. All subsequent changes to the NRC-approved CSP implementation schedule will require prior NRC approval pursuant to 10 CFR 50.90.

FOR THE NUCLEAR REGULATORY COMMISSION

Jacob I. Zimmerman, Chief Plant Licensing Branch III-2

Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

Attachment: Changes to the Facility Operating License

Date of Issuance: August 10, 2011

# ATTACHMENT TO LICENSE AMENDMENT NO. 166

# FACILITY OPERATING LICENSE NO. NPF-85

# **DOCKET NO. 50-353**

Replace the following page of the Facility Operating License with the enclosed page. The revised page is identified by amendment number and contains marginal lines indicating the areas of change.

Remove Insert

<u>License NPF-85</u> <u>License NPF-85</u>

Page 4 Page 4

### (4) Physical Security and Safeguards

Exelon Generation Company shall fully implement and maintain in effect all provisions of the Commission-approves 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 plans<sup>1</sup>, submitted by letter dated May 17, 2006, is entitled: "Limerick Generating Station Security Plan, Training and Qualification Plan, and Safeguards Contingency Plan, Revision 2." The set contains Safeguards Information protected under 10 CFR 73.21.

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. 166.

- (5) Exelon Generation Company shall provide the Director of the Office of Nuclear Reactor Regulation a copy of any application, at the time it is filed, to transfer (excluding grants of security interests or liens) from Exelon Generation Company to its direct or indirect parent, or to any other affiliated company, facilities for the production, transmission or distribution of electric energy having a depreciated book value exceeding ten percent (10%) of Exelon Generation Company's consolidated net utility plant, as recorded on Exelon Generation Company's book of accounts.
- (6) Exelon Generation Company shall have decommissioning trust funds for Limerick, Unit 2, in the following minimum amount, when Limerick, Unit 2, is transferred to Exelon Generating Company:

Limerick, Unit 2

\$59,687,081

- (7) The decommissioning trust agreement for Limerick, Unit 2, at the time the transfer of the unit to Exelon Generation Company is effected and thereafter, is subject to the following:
  - (a) The decommissioning trust agreement must be in a form acceptable to the NRC.
  - (b) With respect to the decommissioning trust fund, investments in the securities or other obligations of Exelon Corporation or affiliates thereof, or their successors or assigns are prohibited. Except for investments tied to market indexes or other non-nuclear sector mutual funds, investments in any entity owning one or more nuclear power plants are prohibited.

<sup>&</sup>lt;sup>1</sup> The Training and Qualification Plan and Safeguards Contingency Plan are Appendices to the Security Plan.



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

# EXELON GENERATION COMPANY, LLC DOCKET NO. 50-219

# OYSTER CREEK NUCLEAR GENERATING STATION

### AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 280 Renewed License No. DPR-16

- 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 November 23, 2009, as supplemented by your letters dated July 23, September 24, November 18, December 21, 2010, March 31, May 19, 2011, and July 11, 2011, 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 Renewed Facility Operating License No. DPR-16 is hereby amended to add the following to paragraph 2.C.(4):

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 Renewed License Amendment No. 280.

3. This license amendment is effective as of the date of its issuance. The implementation of the CSP, including the key intermediate milestone dates and the full implementation date, shall be in accordance with the implementation schedule submitted by the licensee on March 31, 2011, and approved by the NRC staff with this license amendment. All subsequent changes to the NRC-approved CSP implementation schedule will require prior NRC approval pursuant to 10 CFR 50.90.

FOR THE NUCLEAR REGULATORY COMMISSION

Jacob I. Zimmerman, Chief Plant Licensing Branch III-2

Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

Attachment: Changes to the

Renewed Facility Operating License

Date of Issuance: August 10, 2011

# ATTACHMENT TO LICENSE AMENDMENT NO. 280

# RENEWED FACILITY OPERATING LICENSE NO. DPR-16

# **DOCKET NO. 50-219**

Replace the following page of the Renewed Facility Operating License with the enclosed page. The revised page is identified by amendment number and contains marginal lines indicating the areas of change.

Remove Insert

Renewed License DPR-16 Renewed License DPR-16

Page 4 Page 4

(4) Exelon Generation Company 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, submitted by letter dated May 17, 2006, is entitled: "Oyster Creek Nuclear Generating Station Security Plan, Training and Qualification Plan, and Safeguards Contingency Plan, Revision 5." The set contains Safeguards Information protected under 10 CFR 73.21.

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 Renewed License Amendment No. 280.

- (5) Inspections of core spray spargers, piping and associated components will be performed in accordance with BWRVIP-18, "BWR Core Spray Internals Inspection and Flaw Evaluation Guidelines," as approved by NRC staff's Final Safety Evaluation Report dated December 2, 1999.
- (6) Long Range Planning Program Deleted
- (7) Reactor Vessel Integrated Surveillance Program

Exelon Generation Company is authorized to revise the Updated Final Safety Analysis Report (UFSAR) to allow implementation of the Boiling Water Reactor Vessel and Internals Project reactor pressure vessel Integrated Surveillance Program as the basis for demonstrating compliance with the requirements of Appendix H to Title 10 of the *Code of Federal Regulations* Part 50, "Reactor Vessel Material Surveillance Program Requirements," as set forth in the licensee's application dated December 20, 2002, and as supplemented on May 30, September 10, and November 3, 2003.

All capsules in the reactor vessel that are removed and tested must meet the test procedures and reporting requirements of the most recent NRC-approved version of the Boiling Water Reactor Vessel and Internals Project Integrated Surveillance Program appropriate for the configuration of the specimens in the capsule. Any changes to the capsule withdrawal schedule, including spare capsules, must be approved by the NRC prior to implementation. All capsules placed in storage must be maintained for future insertion. Any changes to storage requirements must be approved by the NRC, as required by 10 CFR Part 50, Appendix H.

<sup>&</sup>lt;sup>1</sup> The Training and Qualification Plan and Safeguards Contingency Plan are Appendices to the Security Plan.



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

# EXELON GENERATION COMPANY, LLC

### PSEG NUCLEAR LLC

### **DOCKET NO. 50-277**

### PEACH BOTTOM ATOMIC POWER STATION, UNIT 2

### AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 281 Renewed License No. DPR-44

- 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 November 23, 2009, as supplemented by your letters dated July 23, September 24, November 18, December 21, 2010, March 31, May 19, 2011, and July 11, 2011, 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 Renewed Facility Operating License No. DPR-44 is hereby amended to add the following to paragraph 2.C.(3):

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. 281.

3. This license amendment is effective as of the date of its issuance. The implementation of the CSP, including the key intermediate milestone dates and the full implementation date, shall be in accordance with the implementation schedule submitted by the licensee on March 31, 2011, and approved by the NRC staff with this license amendment. All subsequent changes to the NRC-approved CSP implementation schedule will require prior NRC approval pursuant to 10 CFR 50.90.

FOR THE NUCLEAR REGULATORY COMMISSION

Jacob I. Zimmerman, Chief Plant Licensing Branch III-2

Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

Attachment: Changes to the

Renewed Facility Operating License

Date of Issuance: August 10, 2011

# ATTACHMENT TO LICENSE AMENDMENT NO. 281

# RENEWED FACILITY OPERATING LICENSE NO. DPR-44

# **DOCKET NO. 50-277**

Replace the following pages of the Renewed Facility Operating License with the enclosed pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

<u>Remove</u> <u>Insert</u>

<u>License DPR-44</u> <u>License DPR-44</u>

Page 3
Page 4
Page 4

- (5) Exelon Generation Company, pursuant to the Act and 10 CFR Parts 30 and 70, to possess, but not to separate, such byproduct and special nuclear material as may be produced by operation of the facility, and such Class B and Class C low-level radioactive waste as may be produced by the operation of Limerick Generating Station, Units 1 and 2.
- C. This renewed license shall be deemed to contain and is subject to the conditions specified in the following Commission regulations in 10 CFR Chapter I: Part 20, Section 30.34 of Part 30, Section 40.41 of Part 40, Section 50.54 of Part 50, and Section 70.32 of Part 70; all applicable provisions of the Act and the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified below:

### (1) Maximum Power Level

Exelon Generation Company is authorized to operate the Peach Bottom Atomic Power Station, Unit 2, at steady state reactor core power levels not in excess of 3514 megawatts thermal.

### (2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 279, are hereby incorporated in the license. Exelon Generation Company shall operate the facility in accordance with the Technical Specifications.

### (3) Physical Protection

Exelon Generation Company 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 plans<sup>1</sup>, submitted by letter dated May 17, 2006, is entitled: "Peach Bottom Atomic Power Station Security Plan, Training and Qualification Plan, Safeguards Contingency Plan, and Independent Spent Fuel Storage Installation Security Program, Revision 3." The set contains Safeguards Information protected under 10 CFR 73.21.

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. 281.

#### (4) Fire Protection

The Exelon Generation Company 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 NRC Safety Evaluation Report (SER) dated May 23, 1979, and Supplements dated August 14, September 15, October 10 and November 24, 1980, and in the NRC SERs dated September 16, 1993, and August 24, 1994, subject to the following provision:

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

The Exelon Generation Company may make changes to the approved fire protection program without prior approval of the Commission only if those changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.

- (5) Public Service Electric & Gas Company (PSE&G) to PSEG Nuclear License Transfer Conditions
  - (a) PSEG Nuclear shall take all necessary steps to ensure that the decommissioning trust is maintained in accordance with the application, the requirements of the Order Approving Transfer of License and Conforming Amendment, dated August 21, 2000, and the related Safety Evaluation dated February 16, 2000.
  - (b) The decommissioning trust agreement shall provide that:
    - 1) The use of assets in both the qualified and nonqualified funds shall be limited to expenses related to decommissioning of the unit as defined by the NRC in its regulations and issuances, and as provided in the unit's license and any amendments thereto. However, upon completion of decommissioning, as defined above, the assets may be used for any purpose authorized by law.
    - 2) Investments in the securities or other obligations of PSE&G or affiliates thereof, or their successors or assigns, shall be prohibited. In addition, except for investments tied to market indexes or other non-nuclear-sector mutual funds, investments in any entity owning one or more nuclear power plants shall be prohibited.
    - 3) No disbursements or payments from the trust shall be made by the trustee until the trustee has first given the NRC 30 days notice of the payment. In addition, no disbursements or payments from the trust shall be made if the trustee receives prior written notice of objection from the Director, Office of Nuclear Reactor Regulation.
    - 4) The trust agreement shall not be modified in any material respect without prior written notification to the Director, Office of Nuclear Reactor Regulation.
    - 5) The trustee, investment advisor, or anyone else directing the investments made in the trust shall adhere to a "prudent investor" standard, as specified in 18 CFR 35.32(3) of the Federal Energy Regulatory Commission's regulations.
  - (c) PSEG Nuclear shall not take any action that would cause PSEG Power LLC or its parent companies to void, cancel, or diminish the commitment to fund an extended plant shutdown as represented in the application for approval of the transfer of this license from PSE&G to PSEG Nuclear.
- (6) Exelon Generation Company shall provide to the Director of the Office of



# UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

# EXELON GENERATION COMPANY, LLC

### **PSEG NUCLEAR LLC**

### **DOCKET NO. 50-278**

### PEACH BOTTOM ATOMIC POWER STATION, UNIT 3

### AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 283 Renewed License No. DPR-56

- 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 November 23, 2009, as supplemented by your letters dated July 23, September 24, November 18, December 21, 2010, March 31, May 19, 2011, and July 11, 2011, 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 Renewed Facility Operating License No. DPR-56 is hereby amended to add the following to paragraph 2.C.(3):

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. 283.

3. This license amendment is effective as of the date of its issuance. The implementation of the CSP, including the key intermediate milestone dates and the full implementation date, shall be in accordance with the implementation schedule submitted by the licensee on March 31, 2011, and approved by the NRC staff with this license amendment. All subsequent changes to the NRC-approved CSP implementation schedule will require prior NRC approval pursuant to 10 CFR 50.90.

FOR THE NUCLEAR REGULATORY COMMISSION

Jacob I. Zimmerman, Chief Plant Licensing Branch III-2

Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

Attachment: Changes to the

Renewed Facility Operating License

Date of Issuance: August 10, 2011

# ATTACHMENT TO LICENSE AMENDMENT NO. 283

# RENEWED FACILITY OPERATING LICENSE NO. DPR-56

### **DOCKET NO. 50-278**

Replace the following pages of the Facility Operating License with the enclosed pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

Remove Insert

License DPR-56 License DPR-56

Page 3
Page 4
Page 4

- (5) Exelon Generation Company, pursuant to the Act and 10 CFR Parts 30 and 70, to possess, but not to separate, such byproduct and special nuclear material as may be produced by operation of the facility, and such Class B and Class C low-level radioactive waste as may be produced by the operation of Limerick Generating Station, Units 1 and 2.
- C. This renewed license shall be deemed to contain and is subject to the conditions specified in the following Commission regulations in 10 CFR Chapter I: Part 20, Section 30.34 of Part 30, Section 40.41 of Part 40, Section 50.54 of Part 50, and Section 70.32 of Part 70; all applicable provisions of the Act and the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified below:

# (1) Maximum Power Level

Exelon Generation Company is authorized to operate the Peach Bottom Atomic Power Station, Unit No. 3, at steady state reactor core power levels not in excess of 3514 megawatts thermal.

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

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 281, are hereby incorporated in the license. Exelon Generation Company shall operate the facility in accordance with the Technical Specifications.<sup>1</sup>

# (3) Physical Protection

Exelon Generation Company 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 plans², submitted by letter dated May 17, 2006, is entitled: "Peach Bottom Atomic Power Station Security Plan, Training and Qualification Plan, Safeguards Contingency Plan, and Independent Spent Fuel Storage Installation Security Program, Revision 3." The set contains Safeguards Information protected under 10 CFR 73.21.

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. 283.

<sup>&</sup>lt;sup>1</sup>Licensed power level was revised by Amendment No. 250, dated November 22, 2002, and will be implemented following the 14<sup>th</sup> refueling outage currently scheduled for Fall 2003.

<sup>&</sup>lt;sup>2</sup>The training and Qualification Plan and Safeguards Contingency Plan and Appendices to the Security Plan.

### (4) Fire Protection

The Exelon Generation Company 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 NRC Safety Evaluation Report (SER) dated May 23, 1979, and Supplements dated August 14, September 15, October 10 and November 24, 1980, and in the NRC SERs dated September 16, 1993, and August 24, 1994, subject to the following provision:

The Exelon Generation Company may make changes to the approved fire protection program without prior approval of the Commission only if those changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.

- (5) Public Service Electric & Gas Company (PSE&G) to PSEG Nuclear License Transfer Conditions
  - (a) PSEG Nuclear, shall take all necessary steps to ensure that the decommissioning trust is maintained in accordance with the application, the requirements of the Order Approving Transfer of License and Conforming Amendment, dated August 21, 2000, and the related Safety Evaluation dated February 16, 2000.
  - (b) The decommissioning trust agreement shall provide that:
    - 1) The use of assets in both the qualified and nonqualified funds shall be limited to expenses related to decommissioning of the unit as defined by the NRC in its regulations and issuances, and as provided in the unit's license and any amendments thereto. However, upon completion of decommissioning, as defined above, the assets may be used for any purpose authorized by law.
    - 2) Investments in the securities or other obligations of PSE&G or affiliates thereof, or their successors or assigns, shall be prohibited. In addition, except for investments tied to market indexes or other non-nuclear-sector mutual funds, investments in any entity owning one or more nuclear power plants shall be prohibited.
    - 3) No disbursements or payments from the trust shall be made by the trustee until the trustee has first given the NRC 30 days notice of the payment. In addition, no disbursements or payments from the trust shall be made if the trustee receives prior written notice of objection from the Director, Office of Nuclear Reactor Regulation.
    - 4) The trust agreement shall not be modified in any material respect without prior written notification to the Director, Office of Nuclear Reactor Regulation.
    - 5) The trustee, investment advisor, or anyone else directing the investments made in the trust shall adhere to a "prudent investor" standard, as specified in 18 CFR 35.32(3) of the Federal Energy Regulatory Commission's regulations.
  - (c) PSEG Nuclear, shall not take any action that would cause PSEG



# UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

### **EXELON GENERATION COMPANY, LLC**

#### AND

#### MIDAMERICAN ENERGY COMPANY

### **DOCKET NO. 50-254**

#### QUAD CITIES NUCLEAR POWER STATION, UNIT 1

#### AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 249 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 November 23, 2009, as supplemented by your letters dated July 23, September 24, November 18, December 21, 2010, March 31, May 19, 2011, and July 11, 2011, 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 Renewed Facility Operating License No. DPR-29 is hereby amended to add the following to paragraph 3.E:

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.

3. This license amendment is effective as of the date of its issuance. The implementation of the CSP, including the key intermediate milestone dates and the full implementation date, shall be in accordance with the implementation schedule submitted by the licensee on March 31, 2011, and approved by the NRC staff with this license amendment. All subsequent changes to the NRC-approved CSP implementation schedule will require prior NRC approval pursuant to 10 CFR 50.90.

FOR THE NUCLEAR REGULATORY COMMISSION

Jacob I. Zimmerman, Chief Plant Licensing Branch III-2

Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

Attachment: Changes to the

Renewed Facility Operating License

Date of Issuance: August 10, 2011



# UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

### EXELON GENERATION COMPANY, LLC

#### AND

### MIDAMERICAN ENERGY COMPANY

### **DOCKET NO.50-265**

### QUAD CITIES NUCLEAR POWER STATION, UNIT 2

### AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 244
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 November 23, 2009, as supplemented by your letters dated July 23, September 24, November 18, December 21, 2010, March 31, May 19, 2011, and July 11, 2011, 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.
- Accordingly, the Facility Operating License No. NPF-77 is hereby amended to add the following to paragraph 3.E:

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.

This license amendment is effective as of the date of its issuance. The implementation of the CSP, including the key intermediate milestone dates and the full implementation date, shall be in accordance with the implementation schedule submitted by the licensee on March 31, 2011, and approved by the NRC staff with this license amendment. All subsequent changes to the NRC-approved CSP implementation schedule will require prior NRC approval pursuant to 10 CFR 50.90.

FOR THE NUCLEAR REGULATORY COMMISSION

Jacob I. Zimmerman, Chief Plant Licensing Branch III-2

Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

Attachment: Changes to the

Renewed Facility Operating License

Date of Issuance: August 10, 2011

# ATTACHMENT TO LICENSE AMENDMENT NOS. 249 AND 244

# RENEWED FACILITY OPERATING LICENSES NOS. DPR-29 AND DPR-30

# DOCKET NOS. 50-254 AND 50-265

Replace the following pages of the Facility Operating Licenses with the attached pages. The revised pages are identified by number and contain marginal lines indicating the areas of change.

Remove Insert

<u>License DPR-29</u> <u>License DPR-29</u>

Page 4 Page 4

<u>License DPR-30</u> <u>License DPR-30</u>

Page 4 Page 4

### B. <u>Technical Specifications</u>

The Technical Specifications contained in Appendix A, as revised through Amendment No. 248, 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 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 sets of plans<sup>1</sup>, which contain 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.

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

<sup>&</sup>lt;sup>1</sup> 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. 243, 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. <u>Equalizer Valve Restriction</u>

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 plans<sup>1</sup>, 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.

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

<sup>&</sup>lt;sup>1</sup> The Training and Qualification Plan and Safeguards Contingency Plan are Appendices to the Security Plan.



# UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

### **EXELON GENERATION COMPANY, LLC**

### **DOCKET NO. 50-289**

### THREE MILE ISLAND NUCLEAR STATION, UNIT NO. 1

### AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 275 Renewed License No. DPR-50

- 1. The U.S. Nuclear Regulatory Commission (the Commission or NRC) has found that:
  - A. The application for amendment by Exelon Generation Company, LLC (the licensee) dated November 23, 2009, as supplemented by your letters dated July 23, September 24, November 18, December 21, 2010, March 31, May 19, 2011, and July 11, 2011, 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 Facility Operating License No. DPR-50 is hereby amended to add the following to paragraph 2.c.(3):

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. 275.

3. This license amendment is effective as of the date of its issuance. The implementation of the CSP, including the key intermediate milestone dates and the full implementation date, shall be in accordance with the implementation schedule submitted by the licensee on March 31, 2011, and approved by the NRC staff with this license amendment. All subsequent changes to the NRC-approved CSP implementation schedule will require prior NRC approval pursuant to 10 CFR 50.90.

FOR THE NUCLEAR REGULATORY COMMISSION

Jacob I. Zimmerman, Chief Plant Licensing Branch III-2

Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

Attachment: Changes to the

Renewed Facility Operating License

Date of Issuance: August 10, 2011

# ATTACHMENT TO LICENSE AMENDMENT NO. 275

# RENEWED FACILITY OPERATING LICENSE NO. DPR-50

# **DOCKET NO. 50-289**

Replace the following page of the Renewed Facility Operating License with the attached revised page. The revised page is identified by amendment number and contains marginal lines indicating the areas of change.

Remove Insert

<u>License DPR-50</u> <u>License DPR-50</u>

Page 4 Page 4

### (2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 274 are hereby incorporated in the license. The Exelon Generation Company shall operate the facility in accordance with the Technical Specifications.

### (3) Physical Protection

Exelon Generation Company 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 plans<sup>1</sup>, submitted by letter dated May 17, 2006, is entitled: "Three Mile Island Nuclear Station Security Plan, Training and Qualification Plan, and Safeguards Contingency Plan, Revision 3." The set contains Safeguards Information protected under 10 CFR 73.21.

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. 275.

### (4) Fire Protection

Exelon Generation Company shall implement and maintain in effect all provisions of the Fire Protection Program as described in the Updated FSAR for TMI-1.

Changes may be made to the Fire Protection Program without prior approval by the Commission only if those changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire. Temporary changes to specific fire protection features which may be necessary to accomplish maintenance or modifications are acceptable provided that interim compensate measures are implemented.

- (5) The licensee shall implement a secondary water chemistry monitoring program to inhibit steam generator tube degradation. This program shall include:
  - a. Identification of a sampling schedule for the critical parameters and control points for these parameters;
  - b. Identification of the procedures used to measure the values of the critical parameters;
  - c. Identification of process sampling points;
  - d. Procedure for the recording and management of data;

<sup>&</sup>lt;sup>1</sup> The Training and Qualification Plan and Safeguards Contingency Plan are Appendices to the Security Plan.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION RELATED TO AMENDMENT NO. 168 TO FACILITY OPERATING LICENSE NO. NPF-72, AMENDMENT NO. 168 TO FACILITY OPERATING LICENSE NO. NPF-77, AMENDMENT NO. 175 TO FACILITY OPERATING LICENSE NO. NPF-37, AMENDMENT NO. 175 TO FACILITY OPERATING LICENSE NO. NPF-66, AMENDMENT NO. 194 TO FACILITY OPERATING LICENSE NO. NPF-62. AMENDMENT NO. 238 TO RENEWED FACILITY OPERATING LICENSE NO. DPR-19, AMENDMENT NO. 231 TO RENEWED FACILITY OPERATING LICENSE NO. DPR-25, AMENDMENT NO. 203 TO FACILITY OPERATING LICENSE NO. NPF-11. AMENDMENT NO. 190 TO FACILITY OPERATING LICENSE NO. NPF-18, AMENDMENT NO. 204 TO FACILITY OPERATING LICENSE NO. NPF-39, AMENDMENT NO. 166 TO FACILITY OPERATING LICENSE NO. NPF-85, AMENDMENT NO. 280 TO RENEWED FACILITY OPERATING LICENSE NO. DPR-16, AMENDMENT NO. 281 TO RENEWED FACILITY OPERATING LICENSE NO. DPR-44, AMENDMENT NO. 283 TO RENEWED FACILITY OPERATING LICENSE NO. DPR-56, AMENDMENT NO. 249 TO RENEWED FACILITY OPERATING LICENSE NO. DPR-29. AMENDMENT NO. 244 TO RENEWED FACILITY OPERATING LICENSE NO. DPR-30, AMENDMENT NO. 275 TO RENEWED FACILITY OPERATING LICENSE NO. DPR-50

EXELON GENERATION COMPANY, LLC

BRAIDWOOD STATION, UNITS 1 AND 2

BYRON STATION, UNIT NOS. 1 AND 2

CLINTON POWER STATION, UNIT NO. 1

DRESDEN NUCLEAR POWER STATION, UNITS 2 AND 3



# UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

-2-

LASALLE COUNTY STATION, UNITS 1 AND 2

LIMERICK GENERATING STATION, UNITS 1 AND 2

OYSTER CREEK NUCLEAR GENERATING STATION

PEACH BOTTOM ATOMIC POWER STATION, UNITS 2 AND 3

QUAD CITIES NUCLEAR POWER STATION, UNITS 1 AND 2

THREE MILE ISLAND STATION, UNIT 1

DOCKET NOS. STN 50-456, STN 50-457, STN 50-454, STN 50-455, 50-461, 50-237, 50-249, 50-373, 50-374, 50-352, 50-353, 50-219,

50-277, 50-278, 50-254, 50-265, AND 50-289

#### 1.0 INTRODUCTION

By letter to the U.S. Nuclear Regulatory Commission (NRC, the Commission) dated November 23, 2009 (Agencywide Documents Access and Management System (ADAMS) Accession Number ML093280234) as supplemented by letters dated January 15, July 23, September 24, November 18, December 21, 2010, March 31, May 19, 2011, and July, 11, 2011 (ADAMS Accession Nos. ML100150629, ML102070168, ML102670438, ML103230042, ML103550541, ML110940225, ML111400072, and ML111930024, respectively), Exelon Generation Company, LLC (Exelon, the licensee) submitted the Exelon cyber security plan (CSP)for approval and requested changes to the facility operating licenses for the Braidwood Station, Units 1 and 2, Byron Station, Unit Nos. 1 and 2, Clinton Power Station, Unit No. 1, Dresden Nuclear Power Station, Units 2 and 3, LaSalle County Station, Units 1 and 2, Limerick Generating Station, Units 1 and 2, Oyster Creek Nuclear Generating Station, Peach Bottom Atomic Power Station, Units 2 and 3, Quad Cities Nuclear Power Station, Units 1 and 2, and Three Mile Island Station, Unit 1. The proposed changes would require the licensee to fully implement and maintain in effect all provisions of the Commission-approved CSP.

Exelon also requested correction of typographical errors involving 10 CFR citations in license condition 2.F of the Braidwood Station Unit 1 and 2 Facility Operating Licenses. NRC staff review identified that these typographical errors were inadvertently introduced by NRC letter dated February 1, 2007 (ADAMS Accession No. ML071020372). Correction of the typographical errors only restores the citations as issued by NRC letter and safety evaluation (SE) dated October 28, 20094 (ADAMS Accession No. ML043120031). As a result, this correction is not marked with margin bars and will not be further discussed in this SE.

The supplements dated January 15, July 23, September 24, November 18, December 21, 201, March 31, May 19, and July 11, 2011, provided additional information that clarified the application, did not expand the scope of the application as originally noticed, and did not change the NRC staff's original proposed no significant hazards consideration determination as published in the *Federal Register* on April 12, 2011 (75 FR 20379).

### 2.0 REGULATORY EVALUATION

### 2.1 General Requirements

Consistent with Title 10 of the *Code of Federal Regulations* (10 CFR) Section 73.54(a), the licensee must provide high assurance that digital computer and communication systems, and networks are adequately protected against cyber attacks, up to and including the design basis threat (DBT), as described in 10 CFR 73.1. The licensee shall protect digital computer and communication systems and networks associated with: (i) safety-related and important-to-safety functions; (ii) security functions; (iii) emergency preparedness functions, including offsite communications; and (iv) support systems and equipment which, if compromised, would adversely impact safety, security, or emergency preparedness (SSEP) functions.

The rule specifies that digital computer and communication systems and networks associated with these functions must be protected from cyber attacks that would adversely impact the integrity or confidentiality of data and software; deny access to systems, services, or data; or provide an adverse impact to the operations of systems, networks, and associated equipment.

In the October 21, 2010, Staff Requirements Memorandum (SRM)-COMWCO-10-0001," Regulation of Cyber Security at Nuclear Power Plants" (ADAMS Accession No. ML102940009), the Commission stated that the NRC's cyber security rule provided in 10 CFR 73.54 should be interpreted to include structures, systems, and components (SSCs) in the balance of plant (BOP) that have a nexus to radiological health and safety. The NRC staff determined that SSCs in the BOP that have a nexus to radiological health and safety are those that could directly or indirectly affect reactivity of a nuclear power plant (NPP), and are therefore within the scope of important-to-safety functions described in 10 CFR 73.54(a)(1).

### 2.2 Elements of a Cyber Security Plan

As stated in 10 CFR 73.54(e), the licensee must establish, implement, and maintain a CSP that satisfies the Cyber Security Program requirements of this regulation. In addition, the CSP must describe how the licensee will implement the requirements of the regulation and must account for the site-specific conditions that affect implementation. One method of complying with this regulation is to describe within the CSP how the licensee will achieve high assurance that all SSEP functions are protected from cyber attacks.

### 2.3 Regulatory Guide (RG) 5.71 and Nuclear Energy Institute (NEI) 08-09, Revision 6

RG 5.71, "Cyber Security Programs for Nuclear Facilities" (ADAMS Accession No. ML090340159), describes a regulatory position that promotes a defensive strategy consisting of

a defensive architecture and a set of security controls based on standards provided in the National Institute of Standards and Technology (NIST) Special Publication (SP) 800-53, "Recommended Security Controls for Federal Information Systems and Organizations" and NIST SP 800-82, "Guide to Industrial Control Systems Security," dated September 29, 2008. NIST SP 800-53 and NIST SP 800-82 are based on well-understood cyber threats, risks, and vulnerabilities, coupled with equally well-understood countermeasures and protective techniques.

RG 5.71 divides the above-noted security controls into three broad categories: technical, operational, and management. RG 5.71 provides a framework to aid in the identification of those digital assets that licensees must protect from cyber attacks. These identified digital assets are referred to as critical digital assets (CDAs). Licensees should address the potential cyber security risks to CDAs by applying the defensive architecture and addressing the collection of security controls identified in RG 5.71. RG 5.71 includes a template that provides one method for preparing an acceptable CSP.

The organization of RG 5.71 reflects the steps necessary to meet the requirements of 10 CFR 73.54. Section C.3 of RG 5.71 describes an acceptable method for implementing the security controls, as detailed in Appendix B, "Technical Controls," and Appendix C, "Operational and Management Controls.". Section C.4 of RG 5.71 discusses the need to maintain the established cyber security program, including comprehensive monitoring of the CDAs and the effectiveness of their security protection measures, ensuring that changes to the CDAs or the environment are controlled, coordinated, and periodically reviewed for continued protection from cyber attacks. Section C.5 of RG 5.71 provides licensees and applicants with guidance for retaining records associated with their cyber security programs. Appendix A to RG 5.71 provides a template for a generic cyber security plan which licensees may use to comply with the licensing requirements of 10 CFR 73.54. Appendices B and C provide an acceptable set of security controls, which are based on well-understood threats, vulnerabilities, and attacks, coupled with equally well-understood and vetted countermeasures and protective techniques.

NEI 08-09, Revision 6, closely maps with RG 5.71; Appendix A of NEI 08-09, Revision 6, contains a cyber security plan template that is comparable to Appendix A of RG 5.71. Appendix D of NEI 08-09, Revision 6 contains technical cyber security controls that are comparable to Appendix B of RG 5.71. Appendix E of NEI 08-09, Revision 6, contains operational and management cyber security controls that are comparable to Appendix C of RG 5.71.

The NRC staff stated in a letter (Subject: Nuclear Energy Institute 08-09, "Cyber Security Plan Template, dated May 5, 2010 (ADAMS Accession No. ML101190371), that the licensee may use the template in NEI 08-09, Revision 6 (ADAMS Accession No. ML101180402), to prepare an acceptable CSP, with the exception of the definition of "cyber attack." The NRC staff subsequently reviewed and approved by letter dated June 7, 2010 (ADAMS Accession No. ML101550052), a definition for "cyber attack" to be used in submissions based on NEI 08-09, Revision 6. The licensee submitted a CSP for the Braidwood Station, Units 1 and 2; the Byron Station, Units 1 and 2; the Clinton Power Station, Unit 1; the Dresden Nuclear Power Station, Units 2 and 3; the LaSalle County Station, Units 1 and 2; the Limerick Generating Station, Units

1 and 2; the Oyster Creek Nuclear Generation Station; the Peach Bottom Atomic Power Station; Units 2 and 3; the Quad Cities Nuclear Power Station, Units 1 and 2; and the Three Mile Island Nuclear Station Unit 1 that was based on the template provided in NEI 08-09, Revision 6 and included a definition of cyber attack acceptable to the NRC staff in a table at Enclosure 3 to the CSP, Evaluation of NEI 08-09, Revision 6, Deviations. Additionally, the licensee submitted a supplement to their CSP on March 31, 2011, to include information on SSCs in the BOP that, if compromised, could affect NPP reactivity.

RG 5.71 and NEI 08-09, Revision 6, are comparable documents; both are based on essentially the same general approach and same set of technical, operational, and management security controls. The submitted CSP was reviewed against the corresponding sections in RG 5.71.

The NRC staff finds that the licensee in Section 4.0 of its submittal, identified the applicable regulatory requirements. The regulatory requirements for which the NRC staff based its acceptance are 10 CFR 73.54. The NRC staff reviewed the licensee's submittal against the requirements of 10 CFR 73.54 following the guidance contained in RG 5.71.

# 3.0 TECHNICAL EVALUATION

The NRC staff performed a technical evaluation of the licensee's submittal. The licensee's submittal, with the exceptions of deviations described in Section 4.0, generally conformed to the guidance in NEI 08-09, Revision 6, which was found to be acceptable by the NRC staff and comparable to RG 5.71 to satisfy the requirements contained in 10 CFR 73.54. The NRC staff reviewed the licensee's submittal against the requirements of 10 CFR 73.54 following the guidance contained in RG 5.71.

# 3.1 Scope and Purpose

The licensee's CSP establishes a means to achieve high assurance that digital computer and communication systems and networks associated with the following functions are adequately protected against cyber attacks up to and including the DBT:

- Safety-related and important-to-safety functions;
- Security functions;
- Emergency preparedness functions, including offsite communications; and
- Support systems and equipment which, if compromised, would adversely impact SSEP functions.

The submitted CSP describes achievement of high assurance of adequate protection of systems associated with the above functions from cyber attacks by implementing and documenting:

- The baseline security controls as described in Section 3.1.6 of NEI 08-09, Revision 6, which is comparable to Regulatory Position C.3.3 described in RG 5.71; and
- A Cyber Security Program to maintain the established cyber security controls through a comprehensive life cycle approach as described in Section 4 of NEI 08-09, Revision 6, which is comparable to Appendix A, Section A.2.1 of RG 5.71.

Thus, the licensee's CSP, as originally submitted, is comparable to the CSP in NEI 08-09, Revision 6. However, in its submittal dated March 31, 2011, the licensee clarified its original submission and indicated that the scope of systems includes those BOP SSCs that have an impact on NPP reactivity if compromised. This is in response to and consistent with SRM-COMWCO-10-0001 in which the Commission stated that the NRC's cyber security rule at 10 CFR 73.54 should be interpreted to include SSCs in the BOP that have a nexus to radiological health and safety. The NRC staff determined that those systems that have a nexus to radiological health and safety are those that could directly or indirectly affect reactivity of a NPP, and are therefore within the scope of important-to-safety functions described in 10 CFR 73.54(a)(1).

The NRC staff reviewed the CSP and the supplemental information submitted by the licensee, and found it comparable to Regulatory Position C.3.3 in RG 5.71 and Appendix A, Section A.2.1 of RG 5.71. The NRC staff finds that the licensee established adequate measures to implement and document the Cyber Security Program, including baseline security controls.

Based on the above, the NRC staff finds that the licensee's CSP adequately establishes the Cyber Security Program, including baseline security controls.

# 3.2 <u>Analyzing Digital Computer Systems and Networks and Applying Cyber Security Controls</u>

The licensee's CSPs describes that the Cyber Security Program is established, implemented, and maintained as described in Section 3.1 of NEI 08-09, Revision 6, which is comparable to Regulatory Position C.3.1 described in RG 5.71 to:

- Analyze digital computer and communications systems and networks; and
- Identify those assets that must be protected against cyber attacks to satisfy 10 CFR 73.54(a).

The submitted CSP describes how the cyber security controls in Appendices D and E of NEI 08-09, Revision 6, which are comparable to Appendices B and C in RG 5.71, are addressed to protect CDAs from cyber attacks. This section of the CSP submitted by the licensee is comparable to Regulatory Position C.3 in RG 5.71, without deviation.

Based on the above, the NRC staff finds that the CSP adequately addresses security controls.

# 3.3 Cyber Security Assessment and Authorization

The licensee provided information addressing the creation of a formal, documented, cyber security assessment and authorization policy. This included a description concerning the creation of a formal, documented procedure comparable to Section 3.1.1 of NEI 08-09, Revision 6.

The NRC staff finds that the licensee established adequate measures to define and address the purpose, scope, roles, responsibilities, management commitment, and coordination, and facilitates the implementation of the cyber security assessment and authorization policy. The NRC staff reviewed the CSP submitted by the licensee and found no deviation from Section 3.1.1 of NEI 08-09, Revision 6, which is comparable to Regulatory Position C.3.1.1 and Appendix A, Section A.3.1.1 of RG 5.71.

Based on the above, the NRC staff finds that the CSP adequately established controls to develop, disseminate, and periodically update the cyber security assessment and authorization policy and implementing procedure.

## 3.4 Cyber Security Assessment Team (CSAT)

The CSAT responsibilities include conducting the cyber security assessment, documenting key findings during the assessment, and evaluating assumptions and conclusions about cyber security threats. The submitted CSP outlines the requirements, roles and responsibilities of the CSAT comparable to Section 3.1.2 of NEI 08-09, Revision 6. It also describes that the CSAT has the authority to conduct an independent assessment.

The submitted CSP describes that the CSAT will consist of individuals with knowledge about information and digital systems technology; NPP operations, engineering, and plant technical specifications; and physical security and emergency preparedness systems and programs. The CSAT description in the CSP is comparable to Regulatory Position C.3.1.2 in RG 5.71.

The submitted CSP lists the roles and responsibilities for the CSAT which included performing and overseeing the cyber security assessment process; documenting key observations; evaluating information about cyber security threats and vulnerabilities; confirming information obtained during tabletop reviews, walk-downs, or electronic validation of CDAs; and identifying potential new cyber security controls. This section of the CSP submitted by the licensee is comparable to Regulatory Position C.3.1.2 in RG 5.71, without deviation.

Based on the above, the NRC staff finds that the CSP adequately establishes the requirements, roles and responsibilities of the CSAT.

## 3.5 Identification of CDAs

The submitted CSP states that the licensee will identify and document CDAs and critical systems, including a general description, the overall function, the overall consequences if a compromise were to occur, and the security functional requirements or specifications as

described in Section 3.1.3 of NEI 08-09, Revision 6, which is comparable to Regulatory Position C.3.1.3 of RG 5.71.

Based on the above, the NRC staff finds that the CSP adequately describes the process to identify CDAs.

## 3.6 Examination of Cyber Security Practices

The submitted CSP describes how the CSAT will examine and document the existing cyber security policies, procedures, and practices; existing cyber security controls; detailed descriptions of network and communication architectures (or network/communication architecture drawings); information on security devices; and any other information that may be helpful during the cyber security assessment process as described in Section 3.1.4 of NEI 08-09, Revision 6, which is comparable to Regulatory Position C.3.1.2 of RG 5.71. The examinations will include an analysis of the effectiveness of the existing Cyber Security Program and cyber security controls. The CSAT will document the collected cyber security information and the results of their examination of the collected information.

This section of the CSP submitted by the licensee is comparable to Regulatory Position C.3.1.2 in RG 5.71, without deviation.

Based on the above, the NRC staff finds that the CSP adequately describes the examination of cyber security practices.

## 3.7 Tabletop Reviews and Validation Testing

The submitted CSP describes tabletop reviews and validation testing, which confirm the direct and indirect connectivity of each CDA and identify direct and indirect pathways to CDAs. The CSP states that validation testing will be performed electronically or by physical walkdowns. The licensee's plan for tabletop reviews and validation testing is comparable to Section 3.1.5 of NEI 08-09, Revision 6, which is comparable to Regulatory Position C.3.1.4 of RG 5.71.

Based on the above, the NRC staff finds that the CSP adequately describes tabletop reviews and validation testing.

# 3.8 Mitigation of Vulnerabilities and Application of Cyber Security Controls

The submitted CSP describes the use of information collected during the cyber security assessment process (e.g., disposition of cyber security controls, defensive models, defensive strategy measures, site and corporate network architectures) to implement security controls in accordance with Section 3.1.6 of NEI 08-09, Revision 6, which is comparable to Regulatory Position C.3.3 and Appendix A.3.1.6 to RG 5.71. The CSP describes the process that will be applied in cases where security controls cannot be implemented.

The submitted CSP notes that before the licensee can implement security controls on a CDA, it will assess the potential for adverse impact in accordance with Section 3.1.6 of NEI 08-09, Revision 6, which is comparable to Regulatory Position C.3.3 of RG 5.71.

Based on the above, the NRC staff finds that the CSP adequately describes mitigation of vulnerabilities and application of security controls.

## 3.9 Incorporating the Cyber Security Program into the Physical Protection Program

The submitted CSP states that the Cyber Security Program will be reviewed as a component of the Physical Security Program in accordance with the requirements of 10 CFR 73.55(m). This is comparable to Section 4.1 of NEI 08-09, Revision 6, which is comparable to Regulatory Position C.3.4 of RG 5.71.

This section of the CSP submitted by the licensee is comparable to Appendix A, Section A.3.2 in RG 5.71, without deviation.

Based on the above, the NRC staff finds that the CSP adequately describes review of the CSP as a component of the physical security program.

# 3.10 Cyber Security Controls

The submitted CSP describes how the technical, operational and management cyber security controls contained in Appendices D and E of NEI 08-09, Revision 6, that are comparable to Appendices B and C in RG 5.71, are evaluated and dispositioned based on site-specific conditions during all phases of the Cyber Security Program. The CSP describes that many security controls have actions that are required to be performed on specific frequencies and that the frequency of a security control is satisfied if the action is performed within 1.25 times the frequency specified in the control, as applied, and as measured from the previous performance of the action as described in Section 4.2 of NEI 08-09, Revision 6.

This section of the CSP submitted by the licensee is comparable to Appendix A, Section A.3.1.6 in RG 5.71, without deviation.

Based on the above, the NRC staff finds that the CSP adequately describes implementation of cyber security controls.

## 3.11 <u>Defense-in-Depth Protective Strategies</u>

The submitted CSP describes the implementation of defensive strategies that ensure the capability to detect, respond to, and recover from a cyber attack. The CSP specifies that the defensive strategies consist of security controls, defense-in-depth measures, and the defensive architecture. The submitted CSP notes that the defensive architecture establishes the logical and physical boundaries to control the data transfer between these boundaries.

The licensee established defense-in-depth strategies by: implementing and documenting a defensive architecture as described in Section 4.3 of NEI 08-09, Revision 6, which is comparable to Regulatory Position C.3.2 in RG 5.71; a physical security program, including physical barriers; the operational and management controls described in Appendix E of NEI 08-09, Revision 6, which is comparable to Appendix C to RG 5.71; and the technical controls described in Appendix D of NEI 08-09, Revision 6, which is comparable to Appendix B to RG 5.71.

With regard to the site defensive model, the licensee stated that the boundary between level 4 and level 3 is implemented by either: a) one or more deterministic devices (i.e., data diodes, air gaps) that isolate CDAs in level 4, or b) one or more non-deterministic network isolation devices. Clarification was requested to determine if any of the non-deterministic devices for the security-related CDAs and security CDAs would be connected in parallel (i.e., connecting the same network segments) with the deterministic devices. The licensee clarified by letter dated December 21, 2010 (ADAMS Accession No. ML103550541), that they would not be connected in parallel. The NRC staff finds that this configuration will not negate the protection afforded by the deterministic devices. Based on this clarification, this section is comparable to Regulatory Position C.3.2 and Appendix A, Section A.3.1.5 in RG 5.71.

Based on the above, the NRC staff finds that the CSP adequately describes implementation of defense-in-depth protective strategies.

## 3.12 Ongoing Monitoring and Assessment

The submitted CSP describes how ongoing monitoring of cyber security controls to support CDAs is implemented as described in Appendix E of NEI 08-09, Revision 6, which is comparable to Regulatory Positions C.4.1 and C.4.2 of RG 5.71. The ongoing monitoring program includes configuration management and change control; cyber security impact analysis of changes and changed environments; ongoing assessments of cyber security controls; effectiveness analysis (to monitor and confirm that the cyber security controls are implemented correctly, operating as intended, and achieving the desired outcome) and vulnerability scans to identify new vulnerabilities that could affect the security posture of CDAs.

This section of the CSP submitted by the licensee is comparable to Regulatory Positions C.4.1 and C.4.2 of RG 5.71, without deviation.

Based on the above, the NRC staff finds that the CSP adequately describes ongoing monitoring and assessment.

# 3.13 Modification of Digital Assets

The submitted CSP describes how cyber security controls are established, implemented, and maintained to protect CDAs. These security controls ensure that modifications to CDAs are evaluated before implementation that the cyber security performance objectives are maintained, and that acquired CDAs have cyber security requirements in place to achieve the site's Cyber Security Program objectives.

This section of the CSP submitted by the licensee is comparable to Section 4.5 of NEI 08-09, Revision 6, which is comparable to Appendices A.4.2.5 and A.4.2.6 of RG 5.71. Based on the above, the NRC staff finds that the CSP adequately describes modification of digital assets.

## 3.14 Attack Mitigation and Incident Response

The submitted CSP describes the process to ensure that SSEP functions are not adversely impacted due to cyber attacks in accordance with Section 4.6 of NEI 08-09, Revision 6, which is comparable to Appendix C, Section C.8 of RG 5.71. The CSP includes a discussion about creating incident response policy and procedures, and addresses training, testing and drills, incident handling, incident monitoring, and incident response assistance. It also describes identification, detection, response, containment, eradication, and recovery activities comparable to Section 4.6 of NEI 08-09, Revision 6.

This section of the CSP submitted by the licensee is comparable to Appendix C, Section C.8 of RG 5.71, without deviation.

Based on the above, the NRC staff finds that the CSP adequately describes attack mitigation and incident response.

#### 3.15 Cyber Security Contingency Plan

The submitted CSP describes creation of a Cyber Security Contingency Plan and policy that protects CDAs from the adverse impacts of a cyber attack described in Section 4.7 of NEI 08-09, Revision 6, which is comparable to Regulatory Position C.3.3.2.7 and Appendix C.9 of RG 5.71. The licensee describes the Cyber Security Contingency Plan that would include the response to events. The plan includes procedures for operating CDAs in a contingency, roles and responsibilities of responders, processes and procedures for backup and storage of information, logical diagrams of network connectivity, current configuration information, and personnel lists for authorized access to CDAs.

This section of the CSP submitted by the licensee is comparable to Regulatory Position C.3.3.2.7 of RG 5.71, without deviation.

Based on the above, the NRC staff finds that the CSP adequately describes the cyber security contingency plan.

## 3.16 Cyber Security Training and Awareness

The submitted CSP describes a program that establishes the training requirements necessary for the licensee's personnel and contractors to perform their assigned duties and responsibilities in implementing the Cyber Security Program in accordance with Section 4.8 of NEI 08-09, Revision 6, which is comparable to Regulatory Position C.3.3.2.8 of RG 5.71.

The submitted CSP states that individuals will be trained with a level of cyber security knowledge commensurate with their assigned responsibilities in order to provide high assurance that individuals are able to perform their job functions in accordance with Appendix E of NEI 08-09, Revision 6, which is comparable to Regulatory Position C.3.3.2.8 of RG 5.71 and describes three levels of training: awareness training, technical training, and specialized cyber security training.

Based on the above, the NRC staff finds that the CSP adequately describes the cyber security training and awareness.

## 3.17 <u>Evaluate and Manage Cyber Risk</u>

The submitted CSP describes how cyber risk is evaluated and managed utilizing site programs and procedures comparable to Section 4.9 of NEI 08-09, Revision 6, which is comparable to Regulatory Position C.4 and Appendix C, Section C.13 of RG 5.71. The CSP describes the Threat and Vulnerability Management Program, Risk Mitigation, Operational Experience Program; and the Corrective Action Program and how each will be used to evaluate and manage risk.

This section of the CSP submitted by the licensee is comparable to Regulatory Position C.4 and Appendix C, Section C.13 of RG 5.71, without deviation.

Based on the above, the NRC staff finds that the CSP adequately describes evaluation and management of cyber risk.

#### 3.18 Policies and Implementing Procedures

The submitted CSP describes development and implementation of policies and procedures to meet security control objectives in accordance with Section 4.10 of NEI 08-09, Revision 6, which is comparable to Regulatory Position C.3.5 and Appendix A, Section A.3.3 of RG 5.71. This includes the process to document, review, approve, issue, use, and revise policies and procedures.

The CSP also describes the licensee's procedures to establish specific responsibilities for positions described in Section 4.11 of NEI 08-09, Revision 6, which is comparable to Appendix C, Section C.10.10 of RG 5.71.

This section of the CSP submitted by the licensee is comparable to Regulatory Position C.3.5, Appendix A, Section A.3.3, and Appendix C, Section C.10.10 of RG 5.71, without deviation. Based on the above, the NRC staff finds that the CSP adequately describes cyber security policies and implementing procedures.

## 3.19 Roles and Responsibilities

The submitted CSP describes the roles and responsibilities for the qualified and experienced personnel, including the Cyber Security Program Sponsor, the Cyber Security Program

Manager, Cyber Security Specialists, the Cyber Security Incident Response Team (CSIRT), and other positions as needed. The CSIRT initiates in accordance with the Incident Response Plan and initiates emergency action when required to safeguard CDAs from cyber security compromise and to assist with the eventual recovery of compromised systems. Implementing procedures establish roles and responsibilities for each of the cyber security roles in accordance with Section 4.11 of NEI 08-09, Revision 6, which is comparable to Regulatory Position C.3.1.2, Appendix A, Section A.3.1.2, and Appendix C, Section C.10.10 of RG 5.71.

Based on the above, the NRC staff finds that the CSP adequately describes cyber security roles and responsibilities.

## 3.20 Cyber Security Program Review

The submitted CSP describes how the Cyber Security Program establishes the necessary procedures to implement reviews of applicable program elements in accordance with Section 4.12 of NEI 08-09, Revision 6, which is comparable to Regulatory Position C.4.3 and Appendix A, Section A.4.3 of RG 5.71.

Based on the above, the NRC staff finds that the CSP adequately describes Cyber Security Program review.

# 3.21 Document Control and Records Retention and Handling

The submitted CSP describes how the licensee has established the necessary measures and governing procedures to ensure that sufficient records of items and activities affecting cyber security are developed, reviewed, approved, issued, used, and revised to reflect completed work. The CSP stated that superseded portions of certain records will be retained for at least three years after the record is superseded, while audit records will be retained for no less than 12 months in accordance with Section 4.13 of NEI 08-09, Revision 6. However, this guidance provided by industry to licensees did not fully comply with the requirements of 10 CFR 73.54.

In a letter dated February 28, 2011 (ADAMS Accession No. ML110600204), NEI sent to the NRC proposed language for licensees' use to respond to the generic records retention issue, to which the NRC had no technical objection, NRC responded to NEI in a letter dated March 1, 2011, (ADAMS Accession No. ML110490337). The proposed language clarified the requirement by providing examples (without providing an all-inclusive list) of the records and supporting technical documentation that are needed to satisfy the requirements of 10 CFR 73.54. All records will be retained until the Commission terminates the license, and the licensee shall maintain superseded portions of these records for at least three years after the record is superseded, unless otherwise specified by the Commission.

By retaining accurate and complete records and technical documentation until the license is terminated, inspectors, auditors, or assessors will have the ability to evaluate incidents, events, and other activities that are related to any of the cyber security elements described, referenced, and contained within the licensee's NRC-approved CSP. It will also allow the licensee to

maintain the ability to detect and respond to cyber attacks in a timely manner, in the case of an event. In a letter dated March 31, 2011, the licensee responded to the records retention issue using the language proposed by NEI with an additional statement to clarify the meaning of a "superseded" record. The NRC staff found this additional statement to be unacceptable and the licensee responded that it was not their intent to redefine the term "superseded." The licensee issued a letter dated May 19, 2011, to delete the sentence.

Based on the above, the NRC staff finds that the language the licensee proposes to adopt provides for adequate records retention and will support the licensee's ability to detect and respond to cyber attacks. The NRC staff further finds that this section is comparable to Regulatory Position C.5 and Appendix A, Section A.5 of RG 5.71, without deviation. Accordingly, the NRC staff concludes that the licensee's CSP adequately describes cyber security document control and records retention and handling.

## 3.22 Implementation Schedule

The submitted CSP provides a proposed implementation schedule for the Cyber Security Program. In a letter dated February 28, 2011 (ADAMS Package Accession No. ML110600206), NEI sent to the NRC a template for licensees to use to submit their CSP implementation schedules, to which the NRC had no technical objection, NRC responded to NEI in a letter dated March 1, 2011 (ADAMS Accession No. ML110070348). These key milestones include:

- Establish the CSAT;
- Identify CSs and CDAs
- Install a deterministic one-way device between lower level devices and higher level devices;
- Implement the security control "Access Control For Portable And Mobile Devices":
- Implement observation and identification of obvious cyber related tampering to existing insider mitigation rounds by incorporating the appropriate elements;
- Identify, document, and implement cyber security controls as per "Mitigation of Vulnerabilities and Application of Cyber Security Controls" for CDAs that could adversely impact the design function of physical security target set equipment; and
- Commence ongoing monitoring and assessment activities for those target set CDAs whose security controls have been implemented;

In its letter dated March 31, 2011 (ADAMS Accession No. ML110940223), the licensee provided a revised implementation schedule using the NEI template. The NRC staff considers the March 31, 2011, supplement the approved schedule as required by 10 CFR 73.54. Based on the provided schedule ensuring timely implementation of those protective measures that provide a higher degree of protection against radiological sabotage, the NRC staff concludes that the

Cyber Security Program implementation schedule is satisfactory.

The NRC staff acknowledges that, in its submittal dated July 23, 2010, Exelon proposed several CSP milestone implementation dates as regulatory commitments. The NRC staff does not regard the CSP milestone implementation dates as regulatory commitments that can be changed unilaterally by the licensee, particularly in light of the regulatory requirement at 10 CFR 73.54 that "[i]mplementation of the licensee's cyber security program must be consistent with the approved schedule." As the NRC staff explained in its letter to all operating reactor licensees dated May 9, 2011 (ADAMS Accession No. ML110980538), the implementation of the plan, including the key intermediate milestone dates and the full implementation date, shall be in accordance with the implementation schedule submitted by the licensee and approved by the NRC. All subsequent changes to the NRC-approved CSP implementation schedule thus will require prior NRC approval pursuant in 10 CFR 50.90.

## 3.23 Addition of the License Condition

In its submittal dated November 23, 2009, the licensee proposed to add a paragraph to the existing license condition related to the physical security, training and qualification, and safeguards contingency plans in each license. The following paragraph is added to the specified existing license condition:

- (1) For Braidwood, Unit 1 (License Condition 2.F): "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. 168"
- (2) For Braidwood, Unit 2 (License Condition 2.F): "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. 168"
- (3) For Byron, Unit No. 1 (License Condition 2.E): "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. 175"
- (4) For Byron, Unit No. 2 (License Condition 2.F): "Exelon Generation Company shall fully implement and maintain in effect all provisions of the Commissionapproved 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. 175"

- (5) For Clinton, Unit No. 1 (License Condition 2.E): "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. 194"
- (6) For Dresden, Unit 2 (License Condition 2.F): "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. 238"
- (7) For Dresden, Unit 3 (License Condition 2.H): "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. 231"
- (8) For LaSalle, Unit 1 (License Condition 2.C.(27)): "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. 203"
- (9) For LaSalle, Unit 2 (License Condition 2.C.(16)): "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. 190"
- (10) For Limerick, Unit 1 (License Condition 2.E): "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. 204"
- (11) For Limerick, Unit 2 (License Condition 2.C.(4)): "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. 166"
- (12) For Oyster Creek (License Condition 2.C.(4)): "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. 280"
- (13) For Peach Bottom, Unit 2 (License Condition 2.C.(3)): "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. 281"
- (14) For Peach Bottom, Unit 3 (License Condition 2.C.(3)): "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. 283"
- (15) For Quad Cities, Unit 1 (License Condition 3.E): "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"
- (16) For Quad Cities, Unit 2 (License Condition 3.E): "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"
- (17) For Three Mile Island, Unit 1 (License Condition 2.c.(3)): "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. 275"

# 4.0 DIFFERENCES FROM NEI 08-09, REVISION 6

In addition to the table of deviations found in Enclosure 3 of the licensee's CSP, the NRC staff notes the following additional differences between the licensee's submission and NEI 08-09, Revision 6:

- In Section 3.1, "Scope and Purpose," the licensee clarified the definition of important-tosafety functions, consistent with SRM-COMWCO-10-0001.
- In Section 3.21, "Document Control and Records Retention and Handling," the licensee clarified the definition of records and supporting documentation that will be retained to conform to the requirements of 10 CFR 73.54. The licensee deleted a sentence that was meant to clarify the meaning of a "superseded" record.

 In Section 3.22, "Implementation Schedule," the licensee submitted a revised implementation schedule, specifying the interim milestones and the final implementation date, including supporting rationale. The licensee revised Milestone 6 to address only the NEI 08-09, Revision 6, Appendix D technical controls and to address these controls for only the target set CDAs that could adversely impact the design function of physical security target set equipment.

The NRC staff finds all of these deviations to be acceptable as discussed in the respective sections.

## 5.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Illinois, Pennsylvania, and New Jersey State officials were notified of the proposed issuance of the amendment. The State officials had no comments.

# 6.0 ENVIRONMENTAL CONSIDERATION

The amendments change a requirement with respect to installation of use of a facility component located within the restricted area as defined in 10 CFR Part 20. The NRC staff has determined that the amendments involve no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendments involve no significant hazards consideration, and there has been no public comment on such finding published in the *Federal Register* on April 12, 2011, (76 FR 20379). Also, these amendments relate to safeguards matters and do not involve any significant construction impacts and relate to changes in recordkeeping, reporting, or administrative procedures or requirements. Accordingly, the amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9), (10), and (12). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendments.

# 7.0 CONCLUSION

The NRC staff's review and evaluation of the licensee's CSP was conducted using the NRC staff positions established in the relevant sections of RG 5.71. Based on the NRC staff's review, the NRC finds that the licensee addressed the relevant information necessary to satisfy the requirements of 10 CFR 73.54, 10 CFR 73.55(a)(1), 10 CFR 73.55(b)(8), and 10 CFR 73.55(m), as applicable and that the licensee's Cyber Security Program provides high assurance that digital computer and communication systems and networks associated with the following are adequately protected against cyber attacks, up to and including the DBT as described in 10 CFR 73.1. This includes protecting digital computer and communication systems and networks associated with: safety-related and important-to-safety functions; security functions; emergency preparedness functions, including offsite communications; and

support systems and equipment which, if compromised, would adversely impact SSEP functions.

Therefore, the NRC staff finds the information contained in this CSP to be acceptable and upon successful implementation of this program, operation of the Braidwood Station, Units 1 and 2; the Byron Station, Units 1 and 2; the Clinton Power Station, Unit 1; the Dresden Nuclear Power Station, Units 2 and 3; the LaSalle County Station, Units 1 and 2; the Limerick Generating Station, Units 1 and 2; the Oyster Creek Nuclear Generation Station; the Peach Bottom Atomic Power Station; Units 2 and 3; the Quad Cities Nuclear Power Station, Units 1 and 2; and the Three Mile Island Nuclear Station Unit 1 will not be inimical to the common defense and security.

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: Monika Coflin, NSIR

Date of issuance: August 10, 2011

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The amendments approve the Cyber Security Plan (CSP) and associated implementation schedule for the plants listed above. In addition, the amendments revise the existing license condition regarding physical protection in each of the FOLs to require the licensee to fully implement and maintain in effect all provisions of the NRC-approved CSP.

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/

Joel S. Wiebe, Senior Project Manager Plant Licensing Branch III-2 **Division of Operating Reactor Licensing** Office of Nuclear Reactor Regulation

Docket Nos. STN 50-456, STN 50-457, STN 50-454, STN 50-455, 50-461, 50-237, 50-249, 50-373, 50-374, 50-352, 50-353, 50-219, 50-277, 50-278, 50-254, 50-265, and 50-289

#### Enclosures:

- 1. Amendment No. 168 to NPF-72
- 2. Amendment No. 168 to NPF-77
- Amendment No. 175 to NPF-37
- Amendment No. 175 to NPF-66
- 5. Amendment No. 194 to DPR-62
- Amendment No. 238 to DPR-19
- 7. Amendment No. 231 to DPR-25
- Amendment No. 203 to NPF-11
- Amendment No. 190 to NPF-18
- 10. Amendment No. 204 to NPF-39
- 11. Amendment No. 166 to NPF-85
- 12 Amendment No. 280 to DPR-16
- 13. Amendment No. 281 to DPR-44
- 14. Amendment No. 283 to DPR-56
- 15. Amendment No. 249 to DPR-29
- 16. Amendment No. 244 to DPR-30
- 17. Amendment No. 275 to DPR-50
- 18. Safety Evaluation

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ADAMS Accession No. MI111861341 \*By Email dated 7/9/11 \*\*By Email dated 8/09/11

OFFICE	LPL3-2/PM	LPL3-2/LA	CSIRB/BC	OGC(NLO)	LPL3-2/BC
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